MESSAGES TO INDIAN STUDENTS

(An Anthology of Famous Convocation Addresses)

Compiled and Edited

BY

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WITH A FOREWORD

BY

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TO

C. Y. CHINTAMANI

PATRIOT AND JOURNALIST



C. Y. CHINTAMANI

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PREFACE

The chief purpose of compiling these addresses is to bring together, in one volume, the educational views of some of the greatest leaders of thought before the reading public. It is generally complained that convocation addresses delivered by eminent persons at the various universities of India every year are not even available to most of us. To meet this difficulty this compilation has been made. It is no claim on my part that all the best addresses have been taken in, as it is extremely difficult to put all of them in one volume when about two dozen addresses are delivered every year at the annual convocations of the Indian universities. But it can safely be said without exaggeration that every possible effort has been made to include the best ones, though it must also be admitted at the same time that some very good addresses could not be included in this collection owing to want of space. Some passages, again, have been deleted from almost every address as either they were of interest only to one single university and were of no importance to the universities and general, or contained only conventional thanksgivings and the like. In compiling these addresses, my object has been to pnt forth in this authology all the different facts and ideas expressed by different persons at the Indian Universities.

It is my first duty to offer my grateful thanks to Rao Bahadur K. V. Rangaswami Aiyangar, Principal, Central Hindu College of the Benares Hindu University, for kindly writing the foreward for this book. I am thankful also to the registrars of the universities concerned and to those who have delivered these addresses, for kindly permitting me to reprint them.

I wish to express my gratitude to Pt. Shyama Charan Kala, who suggested to me to make a collection of these addresses and was kind enough to help me in selecting them. I have received immense help from Mr. Daya Ram Gupta, M.A., in writing the introduction, for which I am greatly thankful to him. I am also deeply indebted to Mr, Bhawani Shankar of the English Department of the University of Allahabad and Mr. K. Ishwar Dutt, Editor of the "*Twentieth Century*", both of whom have encouraged and helped me in every possible way, even at the cost of their valuable time. It is greatly due to their ungrudging assistance that this compilation could be made. Messrs. Vishwa Nath Tandon and Hari Krishna Kapur have kindly helped me in correcting and revising the proofs. I am thankful to them as they have saved me from many errors: for those that still remain I alone am responsible.

I have ventured to say in this book a few words with regard to the problems of university students I know that the task is difficult and I am concious of my limitations and shortcomings, but my inspiring consolation lies in the hope that worthy readers mould attribute my mistakes of omission and commission more to my literary and intellectual imperfections than to my lack of sincerity or to any desire on my part to hurt others. The liberties I have taken with certain classes of readers in my criticisms will not, I am sure, prevent them from seeing any truth they may contain, however faulty, undesirable or unqualified the language in which it is expressed.

P. D. T.

FOREWORD

The avid pursuit of knowledge for its own sake has been a living tradition in our land. It is natural. In no other country has learning been personified and deified, and an important section of the population been set apart for imparting it gratuitously. In the centuries in which honour rather than worldly advantage was deemed the proper reward for the discharge of this social duty, the charge that "wisdom is hawked about the market places," "to be bought and sold according to a standard of worldly profit" could not be justly levelled against India. Whatever be its other consequences, the close association of learning with religion had this merit : it ennobled the pursuit of knowledge. Learning and research were identified with the search for Truth and Ultimate Reality. What would have been otherwise regarded as a material endeavour was spiritualised and sanctified. The *Upanayanam* ceremony, the initiation of a boy into letters, his being led to the feet of his teacher, and his segregation during the entire term of his pupilage from family and society were all treated as elements of one of the sacraments of life.

The completion of the prescribed period of learning, the end of *brahmacharya*, and the option then given either to lead the life of a celibate dedicating himself to learning and teaching, or to

settle down as a house-holder, or in modern parlance as a citizen, were treated as marking another momentous epoch in his career All through the period of his training, the pupil was treated by the teacher to daily and formal exhortations on his eternal duties as a moral and spiritual person, and on his eternal union (by a spiritual bond) with his teacher, fellow students and society. The practice of such allocutions goes back to and beyond the age of the Upanishads, which illustrate it in many sonorous passages and episodes. The tradition survived the trials of the middle ages, and has persisted in those parts of our country, which are still unaffected by foreign influences and the ideals of the new learning.

The modern University is a by-product of the mood of introspection induced by the Mutiny. Our Universities have slowly increased in number, strength and prestige. We have now sixteen of them, which trace their birth to legislative sanction. During this epoch of slow growth, their progress has been affected now and then by doubts of their social utility. The wisdom of adding to the number of state-aided Universities in India has been repeatedly defended against assault, and is not even to-day a closed question. Almost every glaring evil of the day has been ascribed to our Universities, whether they be social, economic or political. We have been obliged to undertake frequently critical examinations of the props, which have been sustaining

higher education in India, in order to test their soundness and strength. In few other countries has the problem of University education been treated, as it has been in India, as a *live* issue of economic, social, political and even spiritual importance. All this has induced an attitude of intense seriousness in the public mind towards University education and education generally. In India, membership of a University Body has been an object of social ambition. Our Universities play a large part in our lives, individually and collectively ; and we give them an attention, even in regard to their normal activities, which our contemporaries in other countries do not give in the same measure to their Universities.

Our ancient tradition of addressing solemn advice to the acolyte has been reinforced by the monastic traditions of both the East and the West, making every entrant into the brotherhood realise in a very formal manner the obligations he was taking upon himself. The present-day Convocation Address in the Indian University has thus a western as well as an Indian ancestry. The solemn address by the teacher or abbot, the responses (equally solemn) by the acolytes, the pledges offered and taken, all carry us back to the hermitages of Ancient India, to the Buddhist Sangha and to the abbeys of mediaeval Europe Begun perhaps without any consciousness of their historical background, as part and parcel of the mid-Victorian attitude towards public duty,

the custom of delivering annual addresses to the budding graduates has hardened into a habit in our Universities. It is now *de rigeur* for our congregations of graduates to be addressed formally, and in as eloquent language as the speaker can command, on their duties towards themselves, their *alma mater* and the world at large. The speaker is carefully selected, and is one singled out for his outstanding eminence and reputation as a teacher, scientist, man of letters or administrator. The invitation is rarely refused, and is deemed an honour. The duty is accepted and discharged with a sense of high responsiblity. It is not, therefore, a matter for surprise if to-day no public utterances can ordinarily excel these convocation addresses in their ripe wisdom, their faultless diction, their eloquence, and their appositeness not only to the occasions on which they were delivered but their permanent value, considered as the record of the thought and experience of men, who must be considered among the finest flowers of India's intellect. No body of speeches, taken singly or together, can be said to have attained such a high level of excellence, and to be more worthy of permanent preservation. The progress of Indian ideology can be followed sequentially in these speeches.

It must therefore be a cause for poignant regret that so valuable a part of modern literature, constituting an almost new literary *kind*, should

not have been collected and conserved officially by the Universities themselves. As far as I know, only one University has done this, and it is due to the foresight of Sir Ashutosh Mukerjee. I know of two collections of such addresses delivered before the Madras University, and both were made many years ago. I have come across one other—relating to Mysore, which is also the fruit of private enterprise. There has been a grave omission of a public duty. The loss to students is immeasurable. The task of conserving this mass of accumulated academic wisdom might well have been laid on some common body like the Inter-University Board, for which Principal Seshadri recently wrote an admirable sketch of the Universities of India. (Milford, 1935.)

It was, therefore, with pleasure that I received an intimation that Mr. Purushottam Das Tandon proposed to wipe out, in some measure, this reproach, by publishing an "anthology of Convocation Addresses," treated as 'messages to students.' The intimation came, along with a request to me to write a Foreword to the volume. I accepted the invitation with a sense of responsibility. Our students are those to whom these addresses will be of the most interest. They were intended for them. Every address is a finished exercise in English. Few other types of contemporary composition are better suited to serve as models for our students, whether we consider content or diction.

I think that Mr. Tandon has done wisely in restricting the field of his selection, from among the 200 addresses which have thus far been delivered, to those which are comparatively recent. There is no purpose in treating present-day students to references to old controversies, to which the addresses of the day must have made reference. Of the fifteen addresses collected in this volume of less than 240 pages, none goes beyond 1927, and ten were delivered in the last three years. The interest of the anthology is thus almost topical. But it is not provincial. Speeches given before eleven Universities have been laid under contribution. No speaker is represented twice in the anthology. Skill has been shown in selection and editing. Within a circumscribed field there is abundant variety ; no reader will feel any monotony, by reading "an oft-told tale". Hardly any vital issue of present-day academic life and activity is missed in this collection. In these pages the competitive merits of cultural, scientific and technological instruction find their advocates. Religious, vocational and physical training have their champions also. Two addreses record a powerful caveat against limiting University work to teaching, to the prejudice of original research, and the author of one of them has remarked acidly that the mere transmitter of knowledge is "an intellectual parasite". In a less provocative vein, another speaker has pleaded for University men dedicating their lives to the enlargement of the bounds of knowledge.

Most speakers in the collection are naturally greatly exercised in defining their attitude towards the aims and methods of University instruction. Is it the business of a University to train a man for a "job" ? Is a University condemned because its alumni fail to secure employment, and swell the ranks of "learned beggars" ? Is the time expended in teaching and learning a cultural subject simply wasted ? Is there a better school for the teaching of 'leadership', or to pitch the key lower, in citizenship, than a University ? Is it right to nourish the mind and starve the body—to build Colleges and Laboratories and neglect to provide adequate playing fields? Is it right to oncentrate on the mastery of a foreign tongue and neglect the mother-tongue, to know all about W. B. Yeats and G. K. C and less than nothing about Ghalib and Harishchandra Bharatendu ? Are we still to limp socially on one leg, because University education is the preserve of our sons, and is denied to their sisters ? Is the nationalist reaction in favour of the mother-tongue, or at least an Indian language, to be allowed to go the length of neglecting so useful and so great a language as English ? Is there to be no place in our Universities for religion, and should we enrich the mind and impoverish the soul ? Such are some of the questions to which the reader of this anthology will find weighty and well-considered answers in its pages. Pre-occupation with details of University aims and administration have not kept out from some addresses the consideration

of the fundamental question of the justification of University education, and its subsidy by the State, and the allied subject of the wisdom of starting more Universities in our economically weak country. To those now familiar with the relief which the scare of educated unemployment has brought harassed Finance Ministers, who are unable to raise their Universites above their permanent condition of half-starvation, it will be refreshing to turn to the eloquent plea for an increase in the number of Universities in India, put forward by Pandit Madan Mohan Malaviya, to the passionate appeal of Dr. Rabindranath Tagore to restore to India (in language recalling Ruskin's) her old attitude to *vidya*, and Mr. Chintamani's reasoned statement of the case for adequate state-support to the University, in language whose directness is in refreshing contrast with the elusive expressions of ministers of education.

Our students to-day labour under a load of mental depression. To keep our Universities open and then tell those who enter them that they are out on a fool's errand is tragic. There is undoubtedly great force in the plea that we should discover the latent aptitude of every student and turn him to that pursuit for which he has a vocation and train him up only for it. There is also much wisdom in the suggestion that an *ekka* pony is not a race-horse, and that every aspirant for University education is not fit for it. Sir Hassan Suhrawardy and Sir Herbert

Emerson have reasoned on these lines, and favour a narrowing of the educational mesh so as to allow only the finer minds to pass through it to the Universities. But, should we shut our eyes to what the wisemen of our day, who have made their great wealth in business, are doing, when they use it to found new Universities or to enrich old ones, and to endow cultural studies? In this they have some of the best social thinkers (*e. g.* J. H. Muirhead and Alfred Marshall) as well as the experience of the war behind them. These would prefer to look at education (even in its higher altitudes) as an end in itself, rather as the means to other ends, and would find themselves ranged on the same side with Justice Telang who (in 1882) asked for more Universities for India, and the Asquith Commission of 1922, which pleaded eloquently for liberal state subsidies for Universities. Let us not forget also that the men who have been the great captains of industry in modern times are among those who have been the best friends of humanistic studies the world has seen.

Mr. Tandon has prefixed to his Anthology a short essay, bearing the title "Whither Students ?" in which he has dealt with some of these fundamental questions with insight and ability. It is natural that he who reads Convocation Addresses, in which the speakers often descend to current controversies, should be unable to resist the temptation to follow such illustrious example. I

think that this must, apart from his own vivid convictions, account for the laboured argument for students being given a share in University administration, with which Mr. Tandon's essay closes. The plea is analogous to modern labour's claim to control industry, but is sensibly weaker. If the distinguished men whose utterances are collected in Mr. Tandon's volume, and who are happily with us, are asked to state their views on this intriguing question, the symposium might be of much interest to our students, though they might perhaps not agree with all that may be said.

K. V. Rangaswami Aiyangar

Benares Hindu University,
11th October 1936.

WHITHER STUDENTS ?

The problem of the educated classes has puzzled not only those who are directly affected by it, namely, the students themselves, but also those who have the welfare of the youth of this land at heart. These well-wishers are trying their best to help them and find remedies for their troubles ; but, unfortunately, their efforts have so far met with little success. Some of the suggestions which have been made for facing the situtation are excellent, but there are others which are funny, though these have been so seriously advanced that they have naturally aroused great controversy. The most startling of all is the suggestion to reduce the number of universities and cry halt to the idea of imparting higher education to students on a large scale They want to draw people to trades and professions that may bring them their livelihood. But, unfortunately, they forget that by restricting higher educution they would be doing a great injury to the nation. Instead of improving the condition of universities, removing their shortcomings and surmounting the difficulties with which they are faced, they are bent upon reducing the percentage of highly educated people

in this country. It is generally complained that in most cases the expenses which the students incur on higher education are not adequately compensated for, and it is true too, but on the other hand, we should not lose sight of the fact that our universities have very poor financial equipment and are also handicapped on account of other reasons. The condition of the Indian universities is by no chance satisfactory, and they certainly need thorough overhauling ; but the proposal to reduce their number or restrict higher education is highly retrograde and almost cynical.

The country is passing through an age of transition and the problems of illiteracy, economic exploitation and political subjection are growing more and more acute every day. At this time we need competent men to show the right path to the masses who are looking forward to the youth of the age with great hope. To-day we need people to fight the inimical forces of reaction and exploitation, both in and outside the country. The universities have produced men who have guided the destiny of India. They must produce men who will do so in the future, men who will take the right view of things and face them in a right manner. Keeping these facts in view, we are

not to ignore the importance of higher education and here some lines of Sir Shree Sahib Ji Maharaj deserve to be quoted, "Education, more education, education made perfect, is the only penacea of our country's ills and evils. With more of real education, I dare say, we can easily raise the general level of intelligence of its teeming millions, create in its future generations the habit of clear and deep thinking and of appreciating new values, and turn the acquisitive impulse of its people from its present direction to the direction of truth. It is only in such circumstances that our countrymen would understand their surroundings better and make up their minds to come in line with the other advanced countries of the world in matters social, industrial and economic, and put an end to their senseless quarrels over trifles, and take to the pursuit of ideals that will bring them happiness."

It cannot be denied that universities are not giving education as desired and need an overhauling of the system, and the sooner it is done, the better. But some people are afraid of universities multiplying in India. Perhaps they think that the universities are the cause of unemployment and misery, and ignore the fact

that unemployment is a seasonal disease and most of the countries of the world are suffering from it. There is absolutely no reason to regret the growth of universities in India. Honestly speaking, it is the duty of every Indian to rejoice at it and pray for more. Pandit Madan Mohan Malaviya has rightly observed, "our universities are like so many powerhouses needed to scatter the darkness of ignorance, poverty and cold misery which is hanging like a pall upon the country. The larger the number of well educated scholars the universities will send out, the greater will be the strength of the national army which is to combat ignorance and to spread knowledge. Every lover of India must, therefore, rejoice at the growth of universities in India."

It is to be remembered that India will not be proud of those who will cut down the number of universities, but of those who will find ways and plans for establishing more such centres as may widen the outlook of students and impart real cultural education. The importance of cultural education should not be forgotten even when the problem of unemployment is threatening us. Employment is to be secured and ways are to be found for it, but to forget the importance of cultural education

would be a blunder of the first magnitude. "The surpeme reward of a life devoted to culture is the privilege to dedicate itself to love and service—that beatitude, the glory of which has been chanted in such sublime notes in that 'Lord's Lay' of our times, the Gitanjali."

"Life of my life, I shall ever try to keep my body pure, knowing that thy living touch is upon all my limbs. I shall ever try to keep all untruths out from my thoughts, knowing that thou art that truth which has kindled the light of reason in my mind.

I shall ever try to drive all evils away from my heart and keep my love in flower, knowing that thou hast thy seat in the inmost shrine of my heart.

And it shall be my endeavour to reveal thee in my actions, knowing it is thy power gives me strength to act."

'Such is the vision divine' that Culture brings into ken. Such is the heavenly gleam that shall be followed, with unaverted eye and undaunted heart, by every votary of Culture, the 'golden dream'

'Of knowledge fusing class with class,
Of Civic Hate no more to be,
Of Love to leaven all the mass,
Till every Soul be free !"

Nothing to speak of not giving cultural enducation, even the idea of giving a second place to it would be a fatal one. A great industrialist— an industrialist is supposed to scoff at cultural studies as they seem to have no direct relation with profits—has wisely remarked : "It will be a sad day for industries when cultural studies are given a second place." This shows the primary importance of cultural education even for industrial pursuits, to say nothing of life with its numerous super-economic values.

Even in a short introduction as this, one cannot with propriety omit to make at least a passing reference to the problem of unemployment. The problem of the educated unemployed has assumed a very grave aspect to-day and it is tending to shake the society to its very foundation. Unemployment is certainly responsible for much evil and suffering. It has created a great deal of trouble in this country and cannot be ignored. Measures for tackling it are to be devised and adopted. But it will be a retrograde measure to

solve this problem by stopping higher education and reducing the number of Universities. In India the percentage of literate persons is deplorably lower than in other civilized countries, and any further attempt to reduce it would be a blunder for which the country shall have to pay later or sooner. It is very unfortunate that people think that Universities are job-giving agencies or factories for providing employment to those who spend some time in acquainting themselves with the works of great poets, philosophers, scientists, statesmen and politicians. It is a very mistaken view that the business of the universities is simply to secure jobs for its outgoing students: on them rests the responsibility of supplying the country with great leaders, reformers, politicians, statesmen and others, who will be incharge of the important progressive activities of the nation. The country stands in great need of men animated with high ideals of service and self-sacrifice and endowed with a catholic outlook.

The chief ideal of man in this world is not to be rich or to have a high position in society, but to be honest and of use to others and if the universities can turn out such men, their purpose

is served. It does not matter if graduates do not get "high positions" in life or are not blessed with high government posts. In this connection one cannot help being reminded of the lines of Sir S. Radhakrishnan. "Man is not on earth to be happy. He is here to be honest, to be decent, to be good. Whether you get a prize post or not it is open to you to be useful to your fellows and to work for truth, not because you hope to win, but because your cause is just."

People generally remark, "What is the use in sending students to a University and spending so much money on them when they are not able even to earn their livelihood and cannot support even a small family ?" To this the answer is that such suffering is bound to be so long as young men fail to avail themselves of the opportunities given to them. When students enter the portals of a University, most of them think that it is the most enjoyable time of their life and thus they waste it, forgetting the fact that life is not a "pleasure trip," but it is a battle field where one has to fight tooth and nail every day. Throughout their University career they confine themselves only to a limited number of course books and some how or the other they manage to secure

good divisions too. After that they think that their task is done and there duty discharged. They close their eyes to the fact that there is much more to be done besides this. A mere knowledge of text-books and obtaining good divisions do not entitle them to anything worth mentioning. Stephen Leacock thus sums up his experience as a school-master in Canada:—"I have noted that of my pupils those who seemed the laziest and the least enamoured of books are now rising to eminence at the bar, in business, and in public life, the really promising boys who took all the prizes are now able with difficulties to earn the wages in a summer hotel or as a deck-hand in canal boat."

Such experiences really convince us that in the University career students are to keep their eyes open to realities as well, rather than to mere reading and writing. Unluckily a good many of them spend their university days in cheap luxuries and idle gossip. The idea of even going to the playground does not appeal to them. They have no inclination to help the needy. They can afford to ignore the painful cry of their neighbouring brethren. They have something like an abhorrence for social service. Most of them do not see their way to mix with teachers

or others with superior understanding and intelligence. Civic responsibility is not their concern. Selfishness is their motto throughout. They take great pride in speaking ill of and harbouring petty jealousies against their fellow students. *For them a cinema-hall is a heaven on earth, a carnival a place of pilgrimage, and playing Bridge a constant worship and the easiest way of ignoring unpleasant realities.* Their devotion to these things is amazing. Really, if such persons get high posts and good employment, it is an insult to those who are deservedly employed and are men of high intellect and genuine merit. Are *these* the persons for whom the number of Universities is to be reduced and higher education restricted ? Such men must fail in life and must disappoint those who expect anything from them.

Some people with perfect ease and fulsome confidence can afford to declare that youngmen should be sent to commercial institutes and must engage themselves in trades to earn their living ; nay, they further propose that the Universities should be turned into business centres. But they should always keep this fact in view that an educated beggar is much better than the one who has never known the minds of great sages;

poets and philosophers. The world of a "learned beggar" is much wider than that of the one who has never been to the shrine of learning.

An average University man who acquaints himself with the works of great poets and thinkers feels, as if he possessed riches far superior to what the worlding is proud of, that is, if his education is not altogether showy. He can disdainfully ignore all the pretentious display or the ridiculous self-importance and superiority complex of the ignorant mammon worshipper. His thoughts on such occasions, that is when he is confronted by the wealth-intoxicated ignoramus or by persistent adversity can best be expressed in passages such as this :

"Be not ashmed my brothers, to stand before the proud and the powerful with your white robe of simpleness.

Let your crown be humility, your freedom the freedom of the soul.

Build God's throne daily upon the ample bareness of your poverty.

And know that what is huge is not great and pride not everlasting."

There is no meaning, appeal or consolation in these passages for those not properly taught to live in the majestic world of noble ideas.

Till now we have said nothing about the universities. Are they discharging their duties in a way they ought to? Unfortunately not. As we have admitted at the outset, they have difficulties and suffer from certain limitations; their failure to achieve as much as they can under the existing conditions to ensure the maximum benefit to students is a sin, and His Excellency the Rt. Hon'ble Earl of Lytton while speaking about the university teachers has rightly remarked, "I am impressed more and more by the immense responsibility assumed by those who take a young man's life into their keeping for four or six years, and turn him from boy to man. To give him less than the best, the best that is possible in the circumstances is the Veritable sin against the Holy Ghost of Christian Scripture."

But the indifference of teachers towards students is often appalling, and quite a good number of them seem to regard it beneath their dignity to associate with students and many discharge their duties in a very nominal and perfunctory manner. They fail to realize that

their position confers upon them great opportunities of doing good or evil to the rising generation and this power cannot, with any propriety, be divorced from the corresponding responsibility.

The university teacher has not only to give his academic best to the students in a conscientious and selfless manner, but has also to inculcate in them all the qualities needed in a would-be citizen and leader of the nation in one field or another. The teacher who is anxious to do this cannot afford to be careless at any step. Whatever he says or does must be the doing or saying of a responsible teacher, every minute of whose time and every ounce of whose energy is directly or indirectly but honestly devoted to the welfare and betterment of the taught.

Happily, there is in some quarters a growing realization of the fact that it is high time for students to be associated more and more with the university management. It is not to be suggested even for a moment that there should be anything inconsistent with their devoted application to their studies or anything calculated to interfere with the university discipline. Nor is it intended to encourage students to use the powers conferred on

them to gratify their lower nature or false vanity which gives rise to unreasonable expectations, ridiculous demands and suicidal suggestions. It may also be admitted that students being both immature and a party to the affair, may not be able to judge in a mature and impartial manner and, finally, it is also true that the representation of the guardians and the public, specially the educationists commanding the confidence of those, is the most important thing. But when all this is said, certain important points emerge on the other side and it would be neither wise nor right on the part of the university authorities to deny them their proper place in the scheme of university management.

To take up the position in general we have first of all to make a distinction between a school student and a university student. Not that there are not quite a number of school students capable of thinking for themselves, taking a balanced view of things and making representations in a properly disciplined spirit, but at the university stage the number of such students is quite considerable and a little training with confidence and trust can draw out their capacities to an amazing

degree. Many at their age have done glorious deeds in foreign countries and in India of old. They are quite mature, physically and mentally, though perhaps not academically, and can take a broad and dispassionate view of things. Not only this, they also think educationally, and are interested in educational matters in a more direct manner than their well-wishers, be they teachers or others. Now, to ignore the feelings and wishes of grown up educated and intelligent youngmen, who are educationally self-conscious and think for themselves. is certainly cruel and improper and must produce unpleasant reactions. No one can say that all students come up to that standard, but there is a very large number of them who feel things clearly and a fairly large number of these is capable of taking a proper lead, and these must be accommodated. There are certain matters that they and they alone can represent with proper emphasis and appeal and the right degree of enthusiasm, and their representation will and must make a moral appeal as nothing else would.

As regards discipline and the sense of responsibility, a word or two must be said. Many of our teachers and others with their narrow personalities, old standards and interest in maintaining a

spirit favourable to foreign domination have developed notions of discipline which, to say the least, are more or less offensive to modern taste and in themselves costitute the greatest obstacles to true discipline. A discipline, divorced from life, a discipline of the grave, so to say, is quite unworthy of the name. Again, the discipline of the army cannot be good enough for schools, colleges and universities. And true discipline must really be promoted by allowing students their proper voice in the managing bodies where they can ventilate their grievances, understand the difficulties of the authorities and develop a sense of responsibility. Denying a man responsibility and then complaining that he lacks a sense of responsibility is hardly honest logic.

As a matter of fact, in certain directions this measure must have an extraordinarly wholesome effect on students, as they will feel that they are responsible for the running of the machinery and must respect the laws in the making of which they have a hand.

The exclusion of students from the managing bodies often packed by people much less efficient than they, much less interested in their welfare and

governed by personal interest, results from a fear that the moral effect of the presence of the representatives of the young generation with fresh and patriotic ideas and feelings would, to a great extent, upset a system and shake an ideology which is definitely favourable at once to foreign domination and the easy going nature of some reactionaries. If students are included in executive bodies, they will have two important factors which are absent in the case of other members. First, they will be in direct and constant contact with a great, enlightened and very powerful organised constituency and their voice would be the voice of this constituency, the constituency of educated young men, and secondly, none would dare to impute any motives or considerations of self-interest to them and hence the great moral effect their voice must command.

It is idle to suggest that participation in university politics would interfere with the students' devotion to their studies. If this were true, it can as well be agreed that students taking part in union debates where all kinds of subjects are discussed or in other kinds of semi-political and social work waste their time. Such reasoning is too ridiculous to be seriously considered, specially

all its students and to give them all proper opportunities of physical education ? They are to see that *every* student comes to participate in games or for some other daily exercise. The duty of the universities does not end with affording lectures in the classrooms to the students or enabling them to win some matches in tournaments, but it lies in creating real athletic spirit in them and developing their character. "A place where each teacher comes only in his appointed hour, addresses his particular class of students and then goes away, is a lecture institute and not a university in any sense of the term." No university will be able to justify its existence if it turns out only such men as a commission witness before the Sadler Commission stated, "A man takes his degree without even having wasted a single moment on games or exerted himself more violently than a gentle promenade round the College Square tank, and without ever having belonged to a single club, society, guild or fraternity of any sort whatsoever, that is, without having had any real interests in which two people could associate." Another thing that deserves our attention is that almost every university has a dispensary and, of course, a doctor too, but how many students are profited

by them ? In several cases it has been seen that the doctor is less efficient in his profession but more efficient in flattering those who are on the managing committee. Thus he sees that he gets his pay all right without doing any service to students. Are students not needed to represent such cases in the committees ?

Reference has been made above, to the need of inculcating in students social and parliamentary virtues so that they may have something with which to impress and serve their fellowmen and neighbours in life and play their part in the evolution of democracy. All that the universities do in this connexion is to provide some opportunities to students without caring to see how many students take advantage of those opportunities or enforcing participation of pitiable truants and bookworms in non-academic activities. Inspite of their academic successes and attainments, they are so often tragic failures in social life. The breakneck competition resulting from unemployment is to some extent compelling some thinking students to extend their qualifications; but there is yet much for the universities to do and, above all, it is necessary to change the attitude of students towards education. It may be mentioned in

passing that there is something like moral and indirect compulsion which has all the advantages and none of the evil effects of legal compulsion and universities, if they have the will, can certainly resort to that.

Now a word about that part of education of which the universities appear to be particularly proud—namely, education of the intellect. While it is undoubtedly true, and none in his senses would dare deny it, that the intellectual output of a graduate is far greater than that of the uninstructed villager and on the whole the intellectual level of the class to which most educated men belong has risen as a result of education, all the same there is a very great and clear want of true intellectual originality, independence, thoroughness, systematic thinking, confidence and constructive ability in our graduates, not excluding even the so-called brilliant and first class graduates who are supposed to bring credit to their *alma mater* and country in the eyes of others. All that the students—a large majority of them in any case—care to do is to cram certain things and devote special attention to answers to expected questions contained in market notes or the class notes dictated to them. The examination point of view

pervades among them throughout their studies right up to the M. A. standard. A general question is always an object of terror. Such is the intellectual equipment of the alumni of the university! No wonder leaders are in vain looking to them for their contribution to the solution of those national problems that can never be rightly tackled in mock-councils and committees of whose existence and work the nation is practically completely ignorant. Professor Laski in his "Danger of Obedience," says, "I have no use for the lecture that is a mere substitute for books. The university has failed when its students are not aroused to passionate discussions among themselves or when the work they do fails to awaken them to the study of great books." "The student who is satisfied with pemmicanized knowledge has gone through the university with his mind closed, he has eaten facts, but not digested them."

An average university man is supposed to be more cultured, more refined and more decent than an average man who has never been to a university. To the extent a university fails to stamp its students with such human qualities, it has failed in its purpose and has hardly any justification for its unre- ormed existence. Universities cannot give or

secure employment to all its graduates but it is their first duty to turn out men with good tastes, fine hobbies and charged with the noble spirit of service and sacrifice. Their students must have wide vision and should keep themselves away from sectarian outlook and communal or provincial patriotism of a narrow, reactionary and anti-national type, for these are the evils which are eating into the vitals of our society. India is suffering terribly from them, and if even the educated classes indulge in them, where is the hope for India's freedom ?

We might also take the opportunity to put in a few words for students who are naturally expected to take a special interest in this book and what it contains. Students are the future hope of the nation ; on their shoulders rests the responsibility of making India greater than she was, of achieving what the nation is destined to achieve. They can no longer disown their responsibility or remain indifferent to the national problems on the excuse that they are not directly concerned, adequately represented, favoured by circumstances or are not strong enough. Their strength is the strength of the nation and it is for them to create opportunities, alter circumstances and secure influence. Their

youthfulness is their greatest weapon and the confidence that the future is with them is their greatest bulwark against despondency and the greatest inspiration for them to work. It is for them to justify the existence, growth and multiplication of universities by taking the utmost advantage of their opportunities which would provide them with the strongest argument for the maintenance and extension of these opportunities. It is for them to demonstrate in their life that the education of the university teaches them the dignity of labour and inculcates in them that sense of reality and balanced culture which must solve the problem of unemployment sooner or later by natural evolution or natural revolution. It is for them to realize at the moment of their admission to a university that it is their duty to see that their education does not either in its course or its result make them an economic burden on their family, relatives, community or the nation, but that it makes them a useful cultural asset to society. It is high time that they gave up the degrading mentality that equates the educated men with efficient exploiters of their own nation and a useful instrument in the hands of our foreign exploiters. What a misfortune to see the best of our university

products wasted on the official side and indifferent to the needs and the woes of the nation!

A university student is not to be a mute listener only, he has got to be active and creative. By the time a student leaves the portals of his university he has already decided as to the kind of life he is to lead. If he has been constantly thinking of his degree, a government job and enjoyment, he has decided to be a parasite, a dead burden on the nation.

But he may choose to be healthy and strong, master of a branch of knowledge which he may advance and diffuse and be an efficient servant of the nation It is open to him to decide that he will give more to the nation than take from it.

Only if students learn to organise themselves, their voice which is the voice of the nation and the voice of the India that is to be, will have to be heard and respected, whatever their constitutional position. They have got to assume the position that by right belongs to them, if they only learn to identify themselves with the best and noblest in them. They are the makers of their teachers, at least as much as they are theirs. They are the makers of the future society. They are the

custodians of what is best in the past and the enemies of what is out of date. They have only to wake up and think. Every one of them must decide to be a leader in his or her own walk and sphere of life, whatever its extent or description.

Great thinkers can produce ideas and find faults but it is up to students, young and radiant things as they are, to give life and vitality to their ideas and the real destructive and terrifying vigour to these criticisms. Their awakening is the awakening of the nation.

Cannot they begin by determining that their universities shall be ideal and their products, their own selves, the living examples of efficiency, service and sacrifice and the undaunted torch bearers of the nation ?

P. D. Tandon.

1.

The address of Sir Shree Sahibji Maharaj Anand Sarup is striking and vigorous. He is a religious leader and knows the real significance of religion. In his address he lays special emphasis on religious education. Though himself a member of the U. P. Unemployment Committee, he does not attach much importance to the problem of unemployment. He also pooh-poohs the idea of a socialistic programme for the country and does not take a merely economic view of life. One may differ from his views but cannot fail to be impressed by his attitude to life and education. It is an instructive and elevating address.

[Convocation address delivered by Sir Sri Sahabji Maharaj Anand Sarup, at the Agra University, on November 23, 1935.]

MR. VICE-CHANCELLOR AND MEMBERS

OF CONVOCATION,

..............................Education, more education, education made perfect, is the only panacea for our country's ills and evils. With more of real education, I daresay, we can easily raise the general level of intelligence of its teeming millions, create, in its future generations, the habit of clear and deep thinking and of appreciating new values, and turn the acquisitive impulse of its people from its present direction to the direction of Truth. It is only in such circumstances that our countrymen would understand their surroundings better and make up their minds to come in line with the other advanced countries of the world in matters social, industrial and economic, and put an end to their senseless quarrels over trifles, and take to the pursuit of ideals that will bring them happiness. It is only then that would India produce its Tagores and Radhakrishnanas, its Boses and Tatas, its Sulaimans and Saprus, in plentiful ; and would its merchants and manufacturers, directors and technicians, scientists and inventors, financiers and investors, collaborate in freeing the country from poverty and disease and raising it to its proper place of honour in the polity of nations ; and would its statesmen and politicians, and legislators and

public workers unite heads and hearts to devise ways and means to bridge over the wide gulf that at present divides the hearts of the rulers and the ruled ; and, last of all, would its Universities function in the fullest sense of the term. Hundreds of devoted and well-trained professors and researchers would then be seen applying themselves assiduously and whole-heartedly to the execution of their self-imposed task of studying all branches of human knowledge without exception, of accumulating all available knowledge from the four quarters of the globe, of exploring new fields and contributing to the existing stock of knowledge their own respectable quota of new knowledge and of transmitting these vast treasures to the younger generation along with their own lofty ideals of life and service. Given a few centuries of sustained effort and continued progress of this kind, given a sufficient number of generations of diligent and go-ahead youngmen of this type, and Truth or Ultimate Reality, which has so far eluded the scientist and the philosopher, would be localized within measurable distance, and hundreds of our young men, the products of the great Universities of those days, pure of heart, free from doubt and prejudice that cloud human understanding, with minds emancipated from the authority of other human minds and fit to come under the authority of Truth itself and eager to view anh receive everything in the light of actual experience and interpret it in consonance with the dictates of commonsense, would make brave ventures to cross the great

chasm, and scores of these high souls, undaunted by the difficulties or trying conditions of the journey, would one day set their foot on the blessed Land of Promise. Encouraged and emboldened by the success of their compeers, batches of other youngmen would, one after the other, come forward and cheerfully follow their example and thus, slowly and steadily, there would be evolved a race of higher men—men in whom life and the attributes of Spirit shall have the fullest expression, men through whom the gracious object of creation would be truly fulfilled. And when this is accomplished, religion, philosophy and science shall stand reconciled and the vast Universe, which now appears a great mystery, shall be recognised as the greatest 'Teaching University' and the forces of Spirit, shall have good reason to rejoice and sing hallelujahs at this their greatest victory over the forces of matter. Men will then readily recognize one another as brothers, and nations and communities will sink their differences and work for the common good. Mankind will then come to understand the proper use of the acquisitive impulse, and rancour and strife, distrust and jealousy, that disfigure the human society of to-day, will cease to exist in the world.

Such, in brief, is the importance I attach to education and such are the hopes that I entertain in my mind in connection with the advancement of higher education through the agency of our Universities. Before proceed-

ing further, I would like to make it clear that mine are not the hopes of a visionary or of a religious dreamer. Mine are the hopes of one who pins his faith to sound practical experience and the trend of world-events. For, has not University education, in spite of all its faults and failings, transformed life-conditions here in India during the last fifty years or so, and are not all our present political, social and industrial leaders, our authors and poets, artists and architects, philosophers and scientists, of whom the country is so justly proud, one and all, the products of our colleges? If University education, though necessarily imperfect and restricted in character, both qualitatively and quantitatively, has worked wonders in the past in transforming a conservative people like the Indians and has succeeded in producing among them an awakening the like of which was unheard of during the past several thousand years, it should be but just and reasonable to hope that, perfected and extended, it would work still greater wonders in the future.

Besides, take into consideration the amazing progress that scientists of the world have made during the past two decades in the matter of probing into the mysteries of life and the universe, and mark the remarkable ingenuity they have displayed in co-ordinating and synthesizing the discoveries of the various sciences, compare some of the present-day theories of science with those of the last few centuries and judge of the revolutionizing

effect the former have produced on human thought and outlook of life. Speaking of equality, Proudhon wrote in about 1848, "The enthusiasm which possesses us, the enthusiasm of equality, is an intoxication stronger than wine, deeper than love ; a divine passion and furor which the delirium of Leonidas, of St. Bernard, or of Michelangelo can never equal." And the wonder is that people have been clinging to this wild enthusiasm of equality in spite of clear and indisputable evidence of History to show that equality has never existed in any country or community. For example, who is there who does not know that, in every country in the past, the priest and the warrior classes, possessing superior brains and strength, have always been in the enjoyment of superior rights and privileges and that the masses everywhere have always remained hewers of wood and drawers of water ? These teachings of History, however, were persistently ignored, and people, annoyed by the stern realities of life, sought consolation in acting on the principle that the easiest way of curing a disease was that of not admitting it. So it was believed and declared over and over again that all men are equal and, as such, deserving of equal rights and privileges. And if I may be allowed to do so, I would add that even to-day this very false idea constitutes the principal plank in the socialist platform and represents the principal feature of attraction in democracy. But look at the knock-down blow it has recently received at the hands of science. The doctrine of evolution, based on the rocky foundation

of the discoveries of geology and biology, has shattered the old conviction into pieces and the belief is now growing in the civilized world that by nature all individuals, races and species are unequal, for, if it were otherwise, there could be no selection, no emulation and no development whatever. I am sure that, in course of time, as this great truth of science is sufficiently assimilated and appreciated by the civilized world, there will be a general revolt against that soul-killing teaching of democracy, and mediocrity having been consigned to its proper place in the rear, there will be a world-wide demand and search for men of superior type, for 'peaks and pinnacles.' Now men of this type cannot be manufactured to order. A genius has a greater possibility of emergence from the group of talented scholars gathered round a great teacher. And as Universities are centres where great teachers sit to teach and talented scholars assemble to learn, this agency alone will be competent to meet the world demand for the superior type of men.

Let us next turn our attention to the teachings of the science of psychology and ponder for a moment over the conclusions they lead us to. This science teaches us that every new baby on arrival in the world finds it, as has been happily put by Professor William James, a "big, booming and buzzing confusion". Parents, teachers and other helpers assist the child in clearing up this confusion and in harnessing his powers to definite lines of action. So assisted, the child builds an inner world of his own which of course has to be so

constructed as to fit into the needs of the outer. Now the outer world, over which we have no control, forces its demands on us ceaselessly during every moment of our existence which naturally entails a severe strain on our powers. The moment we fail to meet any of its demands, we are ruthlessly punished with dissatisfaction, disease, pain and misery. We hate these punishments and try our best to avoid them. But how many of us do really succeed in the attempt, it is difficult to say. We only know that such of us as are, partly through the assistance received from parents, teachers and other helpers, and partly through self-experience, enabled to realize somewhat accurately what sort of world we are living in and how to behave so as to meet successfully the demands of the outer world, enjoy lives of comparative peace and happiness. If this reading of the teachings of psychology is correct and if it is really possible for man to make life happy and peaceful in this vale of tears through assistance from parents and teachers and self-experience, there need be no hesitation in coming to the conclusion that higher and perfected education alone can save us from the four great curses of human life, for it is through such education that parents and teachers will understand the outer world correctly and learn what sort of help they are to extend to the younger generation, to enable the latter to build up a proper inner world and lead a peaceful and happy life by managing to meet the demands of the outer world successfully.

Lastly, let us study the trend of world-events of the present day. The invention of quick means of travel and communication that have brought the different races of men into very close contact by eliminating distances ; the 'invisible association' of the scientists and philosophers of the world through books and journals that has resulted in uniting the scientific minds of the world into one great organisation and rendering it possible for man to probe deep into the secrets of life and the universe from all possible directions, and, the most important of all, the coming into existence of a world Court of arbitration known as the League of Nations, and the spirit of willing co-operation displayed by so many nations in developing this body into a powerful and extremely useful medium for securing word-peace, all clearly indicate that humanity is slowly but steadily being prepared to attain to the high ideal of the brotherhood of man by forgetting all differences of race and colour and overcoming all geographical and political barriers.

Thus it should be clear that the hopes I have formed for myself, are not altogether groundless. I must, however, confess that I have so far paid no attention to the growing disquiet and uneasiness in India and foreign countries owing to the large-scale unemployment among educated classes. As a member of the U. P. Educated Unemployment Committee, I had occasion to hear from serveral people that extension of University education was responsible for increased unemployment

in the country and that if the country would not immediately cry halt to the blind worship of this fetish of the West, there would soon be such a plethora of discontented and disgruntled graduates in the land that it would become impossible to maintain peace and order. They argued that the absorptive power of the Government departments and the various vocations had utterly collapsed as was evident from the fact of every day occurrence that applications from hundreds of University graduates were received when a post of Rs. 30/- per mensem was advertised in any paper and that if steps were not taken at once to restrict University education, conditions were bound to grow worse from day to day. To speak the truth, it was only the other day that I read in a newspaper that, in the Bihar province, as many as 3,000 candidates assembled at a police office on the basis of a rumour that the department was taking seven recruits to fill vacancies in the ranks of its constabulary. To cut the matter short, I would readily admit that there is considerable unemployment in the country in these days, but at the same time I would beg leave to point out that Universities are not employment-securing or bread-procuring agencies. May be that the courses of study provided in the Universities are misfit and require to be modified or extended to suit the needs of the time, may be that some of the young men taking up courses in arts and science in colleges require to be diverted to other branches, but I see absolutely no justification for restricting University education. You

may by all means enlarge the curricula of your colleges, multiply specialities and allow students to have a wider choice of studies, encourage technical education and devote larger sums of money to it than to ordinary education, but, in the name of goodness, do not suggest any retrograde step in connection with University education, for such a step will not only put a stop to all future progress in the country, but will also revert it to that old condition of intellecutal chaos which it has taken full three quarters of a century of sustained effort to remove.

I must here add that I am not unaware that measures have been taken in Western countries to restrict University education with a view to reduce unemployment among their garduates, but clearly it would be wrong of us to use this fact as an argument in favour of such measures being adopted here in-as-much as the proportion of University students to the population of our province bears no comparison at all to the proportions obtaining in those countries. For example, in Germany the proportion is reported to be 1 to 690, in Scotland 1 to 455, and in the United States of America 1 to 125, while in our province the proportion is 1 to 4,100. The fact that our province has begun to feel the pinch of unemployment although the proportion of its University students to its population is but $\frac{1}{32}$ of that in the United States of America, I would make bold to say, is indicative of its industrially

backward condition rather than of over-production of graduates by its Universities.

We have now reached the stage when I would like to take up an important point deserving of our serious attention, for, it is a point which would not only help us in completely exonerating higher education from the charges laid at its door, but would also enable me to realise that long-cherished desire of mine of which I made mention at the outset. You must be remembering that I spoke a little while ago about the necessity of turning the acquisitive impulse of the people to the direction of Truth. Now this acquisitive impulse of man, when directed towards the objects of the world, is known as 'greed' in the simple language of religion. I am definitely of the opinion that this vice in human character is the root cause of most of our present-day troubles and confusion and that the unemployment problem in the world is but an offshoot of it. If we just look dispassionately at the large-scale arrangements of Nature, we find that, in her bounty, Mother Nature has made ample provision for the sustenance of every form of life and if men were but to apportion its gifts among themselves without permitting greed and avarice to come in, all men, women and children living on earth would have enough of food to satisfy their hunger, enough of wearing material to cover and protect their bodies and enough of fresh air and sunshine to enjoy sound health. But the accursed vice of avarice

and greed, the vile desire to grab and hoard, have made these gifts too few for us. Enquire what made Japan wage war against China and snatch its provinces. Well, it was the desire of grabbing the soya-beans of those provinces. And why is Italy spending its millions on the invasion of innocent Abyssinia? Well, it is the desire of grabbing Abyssinia's rich mines and fertile fields and hoarding more gold in Italian vaults. And why is there so much unemployment in every country in these days? Well, once again it is the desire of grabbing and hoarding. The appetite for more gold, quickened by the experience of the prosperous days of the last Great War, has urged every nation to increase its output of manufactures and food stuffs and, helped by improved scientific methods and devices, every country is now producing much more than it can absorb or sell, and the consequence is that the whole world finds itself in the grip of an unprecedented economic depression and millions of men are starving in the midst of plenty. Expedients like tariff walls and other artificial barriers, instead of improving matters, have only accentuated the difficulties, and the unemployment problem stares every nation in the face.

Thus it will be seen that love of gold and other earthly possessions, over-production and cut-throat competition, jealousy and distrust, the products of the passion of greed, are the real cause of all our troubles and also of unemployment in every country, and clearly, therefore, the remedy lies in the eradication of this

evil from human character rather than in any thing else. The need of the moment, therefore, is not the restricting of education, but the perfecting of it by removing all its existing defects and adding to it all those branches of knowledge which will help humanity in overcoming its lower appetites and satisfying its higher cravings. A University, as the very name implies, is expected to teach universal knowledge. In the long ago, as I have already mentioned, all seats of learning were essentially religious institutions and the study of religion and religious literature was the be-all and end-all of education, for, in those days, religion comprehended all the requirements of human life. But conditions have now changed. Worldliness—not better-worldliness—has taken the place of unworldliness, and religion and theology are not allowed even to cross the threshold of Universities. But theology is assuredly a branch of human knowledge and so is religious experience a branch of human experience. 'The narrow scientific spirit,' pathetically says Prof. Radhakrishnan, 'which starts with a prejudice against religious experience and thinks the inward life of the mystics to be a worthless dream, is not the true philosophic spirit. The data of science and religion, observation and meditation, are the field of philosophy'. You believe in science and teach it, because it is based on observed facts or experience. But you have to teach philosophy also, because without philosophy science is helpless. Science looks out with eyes or through instruments and tells you what it sees,

but it says nothing about ultimate choices. For these you require the light of your whole experience and the wisdom to which scientific knowledge is mere raw material. If such is really the case, if such is the position of scientific knowledge, pray tell me why have you excluded religion and religious experience from your studies and why do you confine yourselves to the experience of the world of sense or of the world at its surface? Is it not false empiricism which holds you back from religious intuitions? You take it from me that you can never make life happy with mere abstract intelligibility—the ideal of science. You must also control the lower appetites of man and satisfy his higher cravings with the help of religion. When religion attempts to dismiss physical facts and phenomena as unreal, you protest, but when it is your turn, you dismiss all religious intuitions as non-existent and feel no compunction! I wonder why it does not ever strike you that materialism is but one practical attitude to life and religion is another, and, as such, both deserve equal consideration in a seminary of 'universal knowledge'? I am sorry I feel constrained to say that, in discarding this important branch of knowledge from our curriculum, we forfeit our claim to the use of the word University for ourselves. You may depend on it that Truth which we all so much love, can never be comprehended with the physical instruments of science, nor can Ultimate Reality which we so much adore, be realized with the mental effort of

philosophy. Providence has located within the human body a special spiritual faculty, and it is the exclusive function of religion to teach man all about that faculty. When that faculty is developed in us like our physical and mental faculties, we shall be able to perceive Truth and realize Ultimate Reality in the same manner as we now perceive and realize the sun with our physical eyes. And when this takes place, you will be both astonished and amused to find that Truth—the goal of science, Ultimate Reality—the goal of philosophy, and God—the goal of religion, are but three names of the same Supreme Essence.

I have now finished what I wanted to say and have only a word or two more to address to the graduates of today. I would first of all offer you, my young friends, my hearty felicitations and the felicitations of all other members of the University at your well deserved success I would next impress upon you what your country that has done so much for you in providing facilities to acquire higher knowledge, expects of you. Your country gave you well-furnished and well-equipped colleges and provided therein capable teachers willing and anxious to impart to you the best of their learning and knowledge and I have no doubt that, you, on your part, have done your very best to receive, chew and digest internally all the learning and experience that were placed at your disposal and also to imbibe the spirit of your teachers and assimilate the

traditions of your *alma mater*. Your country, in return, expects of you that you will make the best use of the knowledge imparted to you and that you will play your part in the struggle of life nobly and well. It expects that acquisition of power and wealth alone will not be the aim and object of life for you and that you will not lose sight of the high ideals of life that all great men of the world and the great men of your own motherland always set before themselves, and lastly, that you will, to the best of your ability, help your countrymen in advancing forward intellectually, socially and economically.

I am aware that you had many occasions of getting into your ears that the universal economic depression has now made the struggle of life more bitter and desperate, but aren't you going out to the world better equipped and better fitted than your predecessors of ten years ago? I admit that there is considerable overcrowding now in almost all trades and professions in the country, but you may take it from me that there are yet enough opportunities of getting work for every capable young man. The Head of every business concern and the Manager of every farm and factory are still on the look-out for really capable assistants. You may not straightway be offered terms of employment suited to the demands of your high ambition, but if you just make it convenient to accept such an offer when it comes your way and put your shoulder to the

wheel whole-heartedly and show your grit and merit to your employer, you are sure to find the road to promotion clear before you. Go to the wide world, my young friends, therefore, with hearts, stout and brave, and plunge yourselves whole-heartedly in the struggle of life, forsaking all notions of false pride and dignity, and prove yourselves worthy of the noble traditions of your *alma mater* and the high expectations of your country. Your country to-day, like every other country of the world, urgently needs men with brains and personality—men in whom character is wedded to intellectual capacity. Go to the wide world, therefore, and prove to the people that you combine in yourselves both these qualities and that you are in every way fit to meet the needs and requirements of your beloved conntry. "Many an army", says Macaulay, "has prospered under a bad commander, but no army has ever prospered under a debating society." May God help you and ptotect you from coming under the command of such a society ?

[Convocation Address delivered orally by The Hon'ble Dr. Sir Shah Muhammad Sulaiman, Kt., M. A., LL. D., Bar-At-Law, Chief Justice, High Court, Allahabad, at the Annual Convocation of the Muslim University, Aligarh, on December 22, 1934.]

Mr. VICE-CHANCELLOR,

......................................Sir, the Islamic conception of education was a spiritual one,and the professed aim was the acquisition of knowledge for its own sake and a devout search after Truth. Knowledge was considered as partaking of something divine and not a mere article of practical usefulness. This noble and sublime ideal has now been replaced by a more materialistic conception. The modern aim of education is a purely secular one ; educational institutions are regarded as training grounds for students to prepare them for the struggle of life, equip them with knowlege and endow them with character. While in olden days greater attention was paid to the spiritual side of education and the imparting of moral and religious culture, in the present days much more stress is laid on intellecutal and physical training. It is expected of educational institutions that they should not only inculcate moral ideas but also impart greater scientific and literary knowledge of practical utility. A denominational institution like the Muslim University can combine both the spiritual and the materialistic ideals of education, and teach the Western Sciences and Arts along with Theology and Islamic Literature.

2.

Sir Shah Muhammad Sulaiman has, in a brief compass, discussed the university problem with great ability. His ideas are not utopian or uncertain and his is the voice not of a dreamer crying in the wilderness, but of a man who lives in the world and knows it. In the course of his address he remarks that "the need of the western system of education is all the greater for a backward country like India, where gross ignorance is still deep-rooted and wide-spread". He appeals to the students to live a simple life and to refrain from extravagance. The address is of great practical importance.

Knowledge nowadays is not the exclusive monopoly of any particular nation or country ; it has unquestionably become an acquisition of International interest. All the researches that are made become the common property of the scholars of all the countries and add to the great store of human knowledge, which is the joint asset of the entire world. Neither the East nor the West can claim knowledge as its sole product, as the present stock is the accumulation of all the countries of the world extending over thousands of years during which humanity has been advancing in civilisation and culture.

The need of the Western system of education is all the greater for a backward country like India, where gross ignorance is still deep-rooted and widespread. If there is anything next to poverty from which India suffers most, it is, without question, the lamentable illiteracy of its masses. Millions and millions of its people are so deeply steeped in ignorance that sometimes one almost despairs of any substantial progress being made in the course of a few generations. One cannot deny that progress has been made during the last half century, but it is so very slow that in comparison with the tremendous strides with which civilisation has advanced in the West, our relative advance is less than nil. It is becoming iucreasingly more difficult for India to come up anywhere near the educational level reached by Western countries, not to speak of overtaking them. Compared with even Japan in the East, the educational

backwardness of our people is simply appalling. It is the utter poverty and illiteracy of the rural population that makes it impossible to appeal to them and make them realise their own miserable condition and adopt some effective measures of betterment. A heavy debt, therefore, lies not only on the State to provide facilities but on the educated classes as well to render every possible service for the uplift of their poor and less informed brethren.

But it must be admitted that the majority of the educated men suffer from a serious handicap in that they are immersed in their own difficulties. An extremely disappointing feature of the modern system of education is that many young men having obtained distinctions in their academic careers are utterly unable to find means to maintin themselves, much less to support their families. During the last century when the supply of men possessing Western knowledge was small, the Government services alone were enough to absorb the entire output of the schools and the colleges. But now with the increasing growth in the number of matriculates and graduates, the supply exceeds by far the existing demand, leading to an acute situation and chronic unemployment. With the tremendous increase in the number of qualified men turned out every year, the vacancies in the posts can never be sufficient for them, and the acuteness of unemployment is bound to become still more chronic with the advance of years, and

discontent may foster hatred against the existing order of things.

No doubt, the increase in the number of students during the last decades has been phenomenal; and judging from the vastness of the population which still remains to be educated and the small percentage of literacy attained so far, there can equally be no doubt that the numbers will go on increasing at a still greater rate. It is futile to try to limit the number of boys and girls reading in the schools and colleges. If accommodation is not available, the schools and colleges themselves will multiply. For a country with hundreds of millions of people, it cannot be said with any truth that the present number of students is by any means too large. Proportionately speaking, the number is considerably smaller than in countries like England; and there is no justification for taking any steps to prevent an increase in the future. Howsoever unfortunate in some respects the ultimate consequence may be, the increasing demand for education is a hopeful sign and it is inevitable that the number must multiply and increase at a progressive rate. It is hopeless to try to stem the tide; the remedy is to re-model the system of education so as to find new fields of cccupation for such increasing number.

The time is gone when mere literary or scientific education imparted in most of the Indian educational institutions could suffice to find work for educated young

men and women. The whole system requires a drastic overhauling. The existing institutions, which impart mere general education must be transformed into semi-vocational institutions so as to befit the students for various callings and occupations. The secondary schools throughout the country are designed pre-eminently to provide purely literary education and qualify matriculates for admission to the universities, and not so much to give them training to adapt themselves to occupations and callings. The existing schools have, no doubt, contributed to the progress of secondary education on a large scale, but it is in consequence of these very schools that the problem ot unemployment has become so acute. Boys are taken away from their hereditary occupations and given nothing but a smattering of literary education instead. If the type of education imparted by the schools were changed, their output can be absorbed into agricultural, industrial and commercial activities. Some vocational training should be made compulsory so that no student should be allowed to pass out of school without having learnt some art or craft on which he could fall back if he cannot afford to prosecute his studies further. The curriculum of the High Schools should include vocational training, and the examination be not a mere test for admission to universities, as it is at present. The problem of unemployment would be solved to a large extent, if instead of creating in their minds a contempt for their trade, the students were given some special training for it, and made more fitted to go back to it.

Manual training or handicraft introduced as a compulsory subject would help to give great relief and provide sufficient technical training to a majority of students so as to obviate the necessity of their prosecuting their studies beyond the school stage.

A radical change in the system of secondary education would divert a large number of students at the completion of their school education to useful occupations and callings. Government Schools should be gradually transformed into institutions of a specialised vocational character in order to serve as models to simllar private institutions. Private enterprises should be directed mainly towards semi-industrial schools, imparting vocational training side by side with general education. The aim should be to have industrial and craft schools in all the important towns, where young men and girls may be trained to earn their livelihood by taking to small industries not requiring much capital.

On the other hand, the value of higher education should he judged both from the cultural and the utilitarian points of view. The universities have come to occupy a prominent position in our material life ; and with the gradual advance of education, their importance is bound to grow greater and greater still. They are without question some of the noblest institutions in the country designed for the extension and

diffusion of knowledge. As repositories of human knowledge, they are to collect together and preserve the acquisitions of Science and Art made in the bygone ages; and as great workshops of learning, they must stimulate new discoveries and inventions. They have to interpret the philosophy of the past to the modern mind, strike out a fresh line of thought and open a new way for original investigation. In addition to being the chief seats of learning for carrying on literary study and scientific research, the Universities must ever remain the great centres for the cultivation of intellect, refinement of feelings and the building up of character. Their merit would depend on the quantity as well as the quality of intellectual contribution to human knowledge that they are able to make through the devoted labours and valuable researches of their teachers and scholars, and on the cultural education that they are able to impart by their discipline and traditions.

But there is the utilitarian aspect as well. The economic and material progress of a country is linked up with the growth of higher University education. Universities cannot constitute themselves into secluded sanctuaries cut off from the matter of fact-life outside; but must play a leading part not only in the cultural advancement of the country, but also in its economic development, which will be expedited in proportion to the increase of efficiency in technical education, and its pace will be regulated by the growth of University departments where practical knowledge is taught.

A larger and larger proportion of the graduates find themselves unable to fit into the economic scheme of the country. It is commonly supposed that this is due to the Universities flooding the country with too many members. But the fault lies not with the number, but with the system of University education, which concentrates attention on literary education mostly and scientific instruction partly, and does not make the students qualified for any trade or profession except the professions of Law and Education. It is no wonder that the profession of Law is so overcrowded. The Universities, which are imparting only general education and are suffering from an utter lack of specialisation, should boldly face the fact and mould themselves so as to be in a position to find employment for their graduates in industries, trade and commerce just as much as in the services. The Universities would be failing in their duty, if they were to allow their students to be drifted away after completing the courses of study, without any fixed aim in mind, and throw them out into a world of fierce competition, where they may not earn even half as much as they spent as students. The academic authorities ought to be in a position to guide the students under their care in selecting their future lines of occupation ; and the courses of study should be so organised as to compel the students to make an early choice of career.

The universities should re-adapt themselves to the needs of the time, and must adjust their teaching to the

requirements of the various professions, services and industries. University life must be in living contact with the practical problems of the country ; and to achieve this the universities must enter into active co-operation with established industrial institutions It is only by the discoveries and inventions of commercial utility made by universities that a betterment of the economic conditions of India can be brought about. What is wanted is an application of scientific research to industrial developments ; and this can be procured by co-ordination and harmony between the Universities and the pioneer industries of the country. Only a re-organisation on such lines will meet the crisis.

Of late years, much has been said on co-ordination and co-operation among the various universities. The dream that there should be co-operation in such a way that only a few particular subjects should be taught at one University and at that University exclusively, is not capable of being realised. Co-ordination in the sense that a subject should not be introduced if provision for it exists at some other University can be thought of only when a question of the addition of some minor subject of lesser importance arises. As far as I can see, the present list of subjects taught in the Indian Universities is not such as to leave much room for curtailment or cut. Unitary teaching Universities have of a necessity to be self-contained, which implies that there should be facility for the teaching of at least all the important subjects on the Arts and the Science sides. The facili-

ties that exist in the Indian Universities, except perhaps in the Arts Classes, are not very wide, and it is extremely doubtful whether a further limitation would be of any utility at all. If a free choice of the subjects is to be given to the students, the question of combination is a matter dependent on individual talents and aptitude, necessitating adequate provision for all the important subjects. There is bound to be a certain amount of overlapping, and so some duplication of work, but it is difficult to see how this can be avoided.

For instance, the number of subjects taught at the Muslim University may, at first sight, appear to be large, but they include only the important subjects, most of which are altogether indispensable. They comprise only the important branches of knowledge, for which there is always a great demand, and in most of which classes are usually full. With the exception perhaps of some solitary subject, it will never be possible to abolish any department altogether. If the number of subjects prescribed at Aligarh were compared with the number of subjects taught at Cambridge, Oxford or London, the contrast would be striking. Perhaps many, who talk of reducing the number of subjects in the Indian Universities, are not aware that at the big English Universities well over 150 different subjects are available to students and there is adequate staff to teach all of them.

In Western countries, technology dominates the whole of modern life and pervades the entire civilisation, and success lies in harnessing the forces of Nature and utilising them for the service of man. Their great prosperity is due to the industrial and mechanical revolution, which has introduced a new method of mass production into industries, yielding better quality for lower prices. This would have hit manual labour very hard, but for the fact that the whole world market is available to them. Countries like Germany, Italy and Japan are making their universities great centres of industrial research with a view to stimulating their industrial progress. The secret of the success of the Japanese system of education lies in the quick assimilation of practical knowledge from Europe and America, giving only a secondary importance to advanced theoretical researches. Her industrial and economic progress is the direct result of the ready adoption of the scientific and technical knowledge of the West.

Only a rapid expansion of industry, trade and commerce can provide sufficient field for a backward country like India, which has an enormously large population. It cannot be denied that there is already a great stimulus to the expansion of business and that great progress is certainly being made and new factories are being built every year. Not only the sugar industry but other big industries are developing. We can foresee that in the immediate future progress will lie in the direction of electrification of all the important

cities and the extension of water-works to all the towns. These alone will absorb a very large number of electrical and mechanical engineers. Then again, the conversion of vast stores of raw-materials, now exported out of India, into finished products can furnish an ample field for employment of technical experts. Besides manufacture, there is the great agricultural industry, which is the mainstay of the large masses in the rural areas. Our methods are crude and primitive and have not kept pace with the advance of scientific improvements adopted in other Colonies of the Empire, which are competing with India. There is great room for improvement of the quality of land, which will immensely increase the value of agricultural produce.

It should be the concern of the universities to foresee the future and so organise themselves as to be able to turn out qualified men and women to meet the country's demand. What we badly need in India is a large body of well trained and well-skilled persons, who, with their industrial education and training, would by their intelligence and labour, add to the productive capacity of the country and its output of manufactured articles, and in that way inaugurate an economic prosperity all round.

If a University had an unlimited purse at its disposal or an inexhaustible source of income, the problem of University education would be simple enough, and nothing more would be needed than a mere

reproduction of the departments of Western Universities. But the paucity of financial resources inexorably puts a limitation on one's ambitions ; expenditure has to be curtailed and kept within narrow bounds for want of sufficient funds. The question then resolves itself into one of mere preference ; which department should have more money than another, the needs of which department can be postponed for another year, how available funds should be apportioned among rival claims and so on. Unfortunately, technological departments involve very heavy initial costs to provide accommodation and equipments, and require heavy recurring expenditure for their maintenance. Hence there is a natural reluctance to open such branches as would swallow up a great part of the income and commit the University to large recurring and non-recurring expenditure. Accordingly, the common University policy throughout India, except Benares, has been to sacrifice the more useful deparments in order that the Universities might have multifarious activities.

The Benares University has succeeded in realising three great ideals, which are specially suited to a country like India. First, its teaching staff is more moderately paid than that of any other Indian University. Secondly, the life led by the students of the University is much simpler and cheaper than at any other University. And thirdly, the University is not only imparting theoretical knowledge, literary and scientific,

but also giving technical training, thus making a real contribution to the industrial development of India and supplying the needs of Indian industries and Indian factories. It has, no doubt, been far more fortunate than the Aligarh University in receiving munificent donations and grants from Indian Princes and other philanthropists ; but this generosity may, in no small measure, be due to the accepted utility of the subject taught there.

The authorities of the Benares University appreciated at an early stage that technical knowledge combined with practical training is best calculated to promote indigenous industries and develop the material resources of the country. Their efforts have been concentrated on devoting more than a quarter of the entire funds to the establishment of the Departments of Technology. Mechanical and Electrical Engineering, Mining and Metallurgy, applied Geology and Surveying, Botany and Agriculture, Industrial and Pharmaceutical Chemistry and other subjects of practical importance are included in the Faculty of Science. Manufactures of oils, soaps and scents, enamelling and electro-plating and numerous other practical things are being taught. The Engineering College has about 550 students, who, while pursuing their studies, are also engaged in producing electric ceiling fans, other mechanical appliances and small machines. Great attempt is being made to produce cheap commercial products as substitutes for imported materials. The

Departments of Technology are in direct touch with manufacturers and have secured a special grant from the Government of the United Provinces. The great success achieved by these departments lies in the fact that the engineering graduates of the Benares University are to be found in every town in India holding suitable posts. They are thus not only earning a living for themselves, but actually helping the industrial and commercial development of the country. This is a great achievement of which the Hindu University can justly be proud, and which example the Muslim University would do well to follow.

Of course, the inadequacy of the funds is the greatest stumbling block in the way of improvements. It is not always found possible on financial grounds to open new departments howsoever much they may be needed. Indeed, sometimes even existing departments have to be badly starved. But once the policy of introducing technical education has been decided upon, it is possible gradually to transform existing departments by suitably changing the syllabus, even though the process be slow. Lest I should be considered as advocating what is impracticable, I may throw out a few suggestions by way of illustration in order to show that a slow transformation can be brought about.

The Department of Physics, instead of concentrating on theoretical, physics or higher research work, might devote greater attention to electrical training,

the handling of dynamos, engines, electric appliances, motors, batteries, etc. What a great boon would it not have been if the workshop of our Department of Physics had possessed a powerful dynamo generating sufficient electricity for supplying to the entire University area instead of purchasing it from a local Electrical Company ! And what a benefit would it not have offered to many, if the department had been giving practical training in the working of electric machines and appliances, when the electrification of the Province is proceeding so rapidly ! We may teach more of Heat and Electricity than the atomic theory of matter and the Stellar conditions.

The Department of Chemistry, instead of specialising in theoretical chemistry or higher chemistry, which in future years would be of no use to a student without a well-equipped laboratory, might well substitute courses in industrial chemistry and gradually encourage students to the practical side of the subject. One may have less of pure chemistry and more of applied chemistry and chemical engineering. The students would then pass out not only with a theoretical knowledge of chemistry, of not much utility in their future careers, but would have a good grounding in the practical side of manufacturing some products on a semi-commercial scale. Trained chemists can set up their own shops as manufacturers, run small factories and gradually expand their business. Researchers in Applied Chemistry, if their

energies were directed more towards commercial products, would produce useful work by their experiments.

Pharmaceutical Chemistry would provide opportunity for studying the chemical and physical properties of Indian drugs. Biochemical analysis would enable the students to work on the indigenous drugs and carry on investigation of their active principles. There are thousands of Indian drugs well-known in the Unani system of medicine to be of great medicinal efficacy, and there is great scope for discovering their medicinal properties and for producing patent medicines, which would be saleable on a commercial basis.

The Department of Botany can, in the same way, teach agricultural, botany, and instead of giving instruction on uncommon plants and trees teach the raising of Indian crops, and have courses in elementary agriculture and gardening and the rearing of Indian fruit-trees. Graduates trained in such methods can fall black on agriculture as a last resort, run model farms and keep fruit gardens, not only maintaining themselves but also setting an excellent example to the ignorant and uninformed cultivators and agriculturists. The department should also pay a special attention to the cultivation of medicinal plants and herbs recognised in the Unani and Ayurvedic systems, and maintain a special botanical garden of the important varieties of such plants. The Department of Zoology might well co-operate with the Tibbiya College and emphasise the teaching of Human Anatomy. Geography, if retained, may be combined with elementary Geology and Survey.

Even on the Arts sides, the Departments of Theology and oriental languages can co-operate with the Department of Philosophy and give a new stimulus to the study of Islamic Philosophy, and reproduce in English or Urdu the ancient Philosophical literature, which suffers in reputation by its inaccessibility.

The Department of History can re-examine historical records in Arabic and Persian, not yet seen by Western historians, who have, accordingly, given wrong versions of many historical events and incorrect pictures of historical personages owing to incomplete information available to them. A real service can be rendered by unearthing such important and valuable records.

The Department of Economics has a great scope for its development and can evolve Indian Economics as a distinct branch of knowledge. Some of the principles accepted as axioms in Western countries are not necessarily applicable to the peculiar conditions in India. And there is a great field open for research and for re-examining the applicability of the recognised principles and exposing the utter futility of some in the different conditions prevailing in this country.

In these ways the Academic Council and the Faculties can slowly change the tone of the teaching and divert energies more and more towards the more practical Sciences and Arts. The direct step of opening new technological departments can be taken later on when sufficient funds become available.

In a poor country like India where the average annual income per head is about 1/15th of the average amount per head, which is yearly saved and put in the Savings Bank accounts in England, the financial resources of private institutions are bound to be always critical. Private Universities cannot have a bountiful supply of funds, and cannot afford to maintain a highly paid teaching staff. The teaching staff of the Muslim University have already made a sacrifice and cheerfully submitted to cuts in their salaries. As security of tenure is essential for a hearty devotion to work, it would be a wise course to give them a definite assurance to remove all future anxieties. If financial resources do not improve much, the inevitable consequence would be a new revised scale of lower salaries for new entrants, without adversely affecting the present incumbents.

But what is all the more necessary is a new tradition for the students to live a simple and cheap life, avoiding all extravagance and dispensing with unnecessary luxuries. It is with great personal discomfort and inconvenience that parents and guardians of a fair majority of the students can afford to meet the heavy expenses of a University life. A high sense of responsibility and regard for those who maintain you at great sacrifice ought to poduce a genuine desire and sincere effort on the part of you students to cut down expenses as much as possible. It is equally your duty to keep yourselves wholly aloof from any active participation in political and other non-academic activities,

and always remember that your primary concern is to devote yourselves exclusively to educational pursuits. When students have the wisdom not to allow their minds to be diverted from their studies by extraneous influences, devotion to work will bring its own reward and will ensure success not only for themselves, but also enable them to maintain the reputation of the Muslim University by their proficiency. The flower of our youth come to this great institution for their education, and it should be our greatest concern to see that the best of our youths go out most qualified and fit to occupy positions of responsibility and gain distinction for themselves and do credit to their *alma mater*.

I must in this connection refer with satisfaction to the new tradition that is being established in the Aftab Hall under the guidance of its enthusiastic Provost. The Aftab Hall has fixed as its great object a simple standard of living and a whole hearted pursuit of studies. One sees in it some resemblance to the Japanese system of University education where students have long hours of study and cheap living. The economic condition of the country may become still more chronic in the years to come, then extravangance will become a greater sin in the future than even what it is at present. Practice of economy, which is signally lacking among Muslims should, therefore, be a necessary part of your training, the negiect of which may entail disastrous consequences.

The Aftab Hall with such a noble ideal in view, should be the model of which the Muslim community

ought to be rightly proud. As the governing idea of the Hall is to enable its inmates to acquire knowledge with the least possible expense, it is laying before the country an example of avoidance of extravagance, denial of pleasure and sacrifice of luxuries with determination and will, worthy of a great institution. The eyes of the Muslims of India are steadfastly fixed on the success of such an endeavour. Every inmate of the Hall should proudly hold his head high as one, who is going to demonstrate before a doubting public that the highest form of education can be acquired in the cheapest possible way, and prove by his conduct that high living and extravagant life are not by any means, a necessary accompaniment of a devoted student. You should, by self-control and discard of any false pride in the display of wealth establish that simple life is far more consonant with the studies of a true scholar. Then alone you would turn out to be enthusiastic patriots who would not shrink from work even though only a moderate remuneration be your lot in life.

Graduates : you, who have now qualified for the University degrees by your hard work and perseverance, have received the best education and training which the University was capable of giving. Having been brought up in the highest University traditions and lived and moved in the University atmosphere for so many years, you have imbibed the true University spirit. Equipped with knowledge, you are going out into the world of life, full of hard

struggle and keen competition, to carve out a career for yourselves. It is only the strength of your character, self-confidence and firm determination, which can win for you success in the face of many obstacles. Future prospects may not always be bright, and the period of waiting may be long, taxing your patience to the utmost degree. Let not any feeling of dejection overcome you, nor disappointment damp your spirit, if you cannot begin life in prosperous circumstances. Even though your progress be slow, keep it steady and make sustained endeavour a principle of life with you.

Many of you, young men, may be the leaders of to-morrow, and come to guide the affairs of our country. The future destiny of India lies in your hands, which you can mould and shape by your conduct. It is your bounden duty to attain a high standard of ability, integrity and self-respect, and maintain the good name of the Muslim University.

Let your University be proud of you ; and let your community feel its strength in you. Prove yourselves to be worthy citizen of our country, worthy citizens of the Empire—and thus worthy of the degrees conferred upon you.

[* Convocation Address delivered by Dr. Sir S. Radhakrishnan, Kt., M.A., D. Litt., Vice-Chancellor, Andhra University, on November 13, 1934.]

............................In conformity with tradition, let me offer my hearty congratulations to you who have received degress to-day. You have successfully completed the prescribed courses of study and are now looking forward to your work in life for which the University training has been a preparation. Latterly, the lack of adjustment between the needs of life and studies in the University has come in for a good deal of comment and criticism that it is unnecessary for me to draw your attention to it. If I tell you, young men and women, that you will have soft jobs and great careers awaiting you, now that you have acquired University degrees, I will be rousing hopes that are destined to disappointment. Unemployment is the lot of many University men the world over. There is something wrong about a system which turns out men who are not wanted by the society which has paid for their training. It is not the function of Universities to produce an academic proletariat which is fed on idleness and so develops mental flabbiness and neurasthenia. The responsibility for this state of affairs is not merely in the educational system but also in the economic situation. You are not accountable; for either. But it is a healthy sign that there is a remarkable agreement among educationists to-day that the system of education requires prastic revision from the foundation to the flagpole. It

Sir S. Radhakrishnan's address is a work of rare devotion and unique distinction. It is characterised by intellectual height and moral appeal. It reveals a highly cultured mind at work. In his address he says that this system of education is out of date and needs revision from foundation to flag pole. He holds that "the Universities should be called upon to produce a higher intellectual class, not only willing subordinates but responsible leaders".

is out of date and unsuited to modern conditions and involves a colossal waste of intellect and energy.

In all its stages, Primary, Secondary and University, a reorientation is necessary. While any member of the general community is entitled to the minimum of education, at any rate, to the Primary standard if he is to function as a unit in a democratic state, the large numbers who constitute the mainstay of any society, the peasants working on the soil and the skilled workers engaged in industries require to be looked after in the Secondary schools. Secondary education is the weakest link in our system. It is dominated exclusively by the University requirements. It must provide a type of education which is complete in itself, enabling those who have benefited by it to take up a position in life. It must, therefore, be so organised as to give a general cultural standard to the bulk of the population and enable them, at the same time, to face the varied requirements of practical life. It must not be its exclusive aim to prepare candidates for University studies. The value of University education is considerably impaired by the presence in the University of men who are unfit for higher, literary or scientific education. The technical schools should train our youths not merely for urban occupations, because the country is fundamentally rural. Agriculture is the foundation of Indian life and will continue to be so for a long time to come.

To-day, with the low agricultural prices, our farmers who are the producers of wealth in our land, are unable

to get enough food for themselves out of the soil they cultivate. In more favourable circumstances, they have a very small surplus to sell. So long as we continue to cultivate our fields with the tools of a past age, the bent stick and the wooden plough, the yield from the soil cannot be increased. If there is to be any improvement, agricultural training suited to our rural conditions is essential. A large number of agricultural schools, small in size and limited in scope, require to be established. Besides, our farmers are generally engaged in some subsidiary industry during the intervals of leisure which field-work involves. In former days, spinning and weaving were the subsidiary industries. Gandhi's attempt to revive them is not a madman's dream. Technical schools where training can be given in industries which can be carried on in small workshops are most urgently needed.

The Universities should be called upon to produce a higher intellectual class, not only willing subordinates but responsible leaders, who will fill important and influential positions in the liberal professions, in the great industries and in public life. They must pay special attention in technological institutes to research in subjects relating to agriculture and industries.

Besides teaching and research, the training of leaders is an essential function of the University. To-day there is no lack of moral energy or disinterestedness, but it is taking unnatural shapes on account of wrong direction. The responsibility of the intellectuals, the

natural leaders of thought and life, is immense. The anxious pre-occupation of the statesmen of all countries at the present moment when competing social, economic and political views are in the field, raises questions of fundamental importance. The issues involved are vital to every interest both of the individual and of humanity. Universities which have for their function the conserving and dispensing of the best traditions of human thought and conduct are deeply affected by the great moral issues about the first principles of social organisation, which these questions raise.

Mazzini defined democracy "as the progress of all through all under the leadership of the wisest and the best." A democracy fails if the people are not sufficiently enlightened to be able to select wise and intelligent leaders. The leaders to-day are neither wise nor intelligent. Scepticism and selfishness are their chief characteristics. They are supported by the rapacity of profiteers, the apathy of the masses, the faint-hearted servility of the intellectuals who make themselves the advocates of devastating prejudices which it should be their mission to uproot. Without any clear vision of humanity's goal, our leaders set forth programmes which they value more than the lives of their fellowmen. They will not hesitate to send millions to death to prove themselves in the right. Their own particular purposes should be achieved by any means, however barbarous or inhuman.

We are witness to-day of the terrible and sinister portent that some of the progressive nations of the

West whose names are synonymous with advanced civilisation are embarking with cynical deliberation on a course which is in conflict not so much with the high injunctions of the religions they profess, but with the most elementary dictates of natural justice and humanity. In a large part of Europe, democracy which was for long considered the great contribution of Europe to world's political thought is now abandoned. Parliamentary government is killed, the press is muzzled, freedom of thought, of speech and of assembly is forbidden. The ordinary decencies of public life, the conventions which raise human society above a pack of animals, the bonds of personal loyalty and friendship, are being swept away by groups who neither respect laws nor recognise the common obligations of humanity. The zeal of the dictators shrinks at nothing, not even carefully planned and cold-blooded murders of political opponents.

The obvious incompetence of governments to deal in a just and effective way with the problem of economic inequality is the cause of the discontent with democracy and this discontent has carried dictators to power. Unimpeded freedom of trade resulted in the exploitation of man by his fellows. The demand for greater economic equality was resented by the vested interests and class conflicts developed. Regulation of private industry on a large scale was undertaken by the governments but not as rapidly as one would desire. Economic effort was, therefore, put under political direction.

Peaceful evolution which is the method of democracy yielded to forcible revolution.

Compulsion thus became the controlling principle of social, economic and political life. If there is a restriction of personal liberty and a denial of opportunities for a full, satisfying and noble life, it only means that economic justice and security ask for their price. The price has been paid in many countries but they are not nearer the goal. The new slavery for mankind has not resulted in economic justice and security.

Selfish and suspicious units which constitute the present politically and economically unorganised world have raised tariff walls which naturally increase personal rivalries and bitterness. It is a state of constant and continuous economic struggle. Those who believe in force for their internal affairs have no hesitation in adopting it in their foreign relations. Militarism is now in the ascendant. Might is to-day more right than ever. Our dictators are all sabrerattlers and scaremongers. They tax the sweat and blood of innocent people in order to maintain armaments. Nations are fed on a diet of blood and iron. Italy is busy turning a people into an army. The boys of Italy are to be prepared "spiritually, physically and militarily" for the profession of arms. Germany and Austria, Russia and France, even Great Britain are piling up preparations for war, while their governments declare that they desire peace. Defending the increased Air Estimate in the House of Commons,

Mr. Baldwin remarked that in future we must regard not the white cliffs of Dover but the left bank of the Rhine as our frontier. No one knows what exactly Baldwin meant and it is doubtful whether he himself knew. But the French took the words to mean that England was at last about to agree to a military alliance with France and they can always quote Baldwin.

The powers of darkness are gathering in every direction. The nations of Europe are drifting towards war with all its incalculable horrors. The next war will be fought largely from the air and it will be much more pitiless, indiscriminating and destructive than anything in the previous history of warfare. It is admitted that there is no defence against air-attack, one can only retaliate. Invasion by an army could be repelled by ranging a sufficiently strong force against it. So also with blockade by fleet. But there is no reliable defence against a raid by bombing aeroplanes. However large our flying force may be, a much smaller one could deliver a blow levelled straight against the civilian population, old and young, women and children, hospitals and nurseries. The only defence is by reprisals. The enemy can retaliate by raining from the air high explosives, poison gas and disease bacteria. If Paris cannot guard itself against German air-attack, it can bomb Berlin and the knowledge that the power exists may tame the Germans. But it is also true that air war will be decided by the power that can get its blow

in first. When the next war breaks out, we will have a relapse into barbarism, if not the collapse of civilisation. The world calls itself civilised. Though it has accomplished a good deal in science and organisation, though literature and philosophy, religion and art have been going on for centuries, we find ourselves to-day as helpless and untutored children in the presence of conditions which, if not dealt with and remedied, will bring this civilisation to an end. Mankind has been defined by a cynic as an anthropoid species afflicted with megalomania. Perhaps he is right.

The present crisis is so stupid and yet so serious in its consequences that civilisation itself may be ruined. Mankind must be dragged out of the rut in which it had become wedged and compelled to make a fresh start. A society does not grow out of its own motion. It is carried forward by the efforts of a minority, a 'remnant' in the words of Matthew Arnold, and that minority owes its inspiration to individuals, the wisest and the best, of insight and wisdom, of courage and power. It is the individuals who rise above their national surroundings, who are in communion with the good, seen and unseen, who have the energy to graft their vision on to the existing social substance—it is they who will carry civilisation forward. Compared with the war cries and emotional outbursts of the political dictators to-day, the parting message of Gandhi to the last session of the Indian National Congress is like a ray of heavenly light let into a world of deep darkness. "I

shall never accept self-government brought about by violence." Eagerly desirous of India's freedom, foremost among us in his power to further it, he tells us that dear to him as political freedom is, truth and non-violence are yet more dear. He warns his fellow-workers in the Congress to develop a delicate sense of moral responsibility and respect for one's fellowmen which it would be hard to find equalled elsewhere in political struggles. He commands them to transcend the finitude and relativity which belongs to politics as a natural phenomenon and develop the capacity to apprehend absolute truth and recognise an absolute obligation, all that we include under the names of reason and conscience, truth and love. As we contemplate the stupendous movement across the pages of history, we witness the power of ideas. Here is a great idea which Gandhi is impressing on the mind and conscience of the people. He appeals to us to rise to new heights, to seek new means of endeavour to tread new paths towards national reconstruction, greatness and accomplishment, to build a new India on moral and spiritual foundations. In placing the interests of universal truth first and national politics second, he has lit a candle that will not easily be put out. The light of it will have a far penetration in time and space. It will be seen and welcomed by all honest and sincere people the world over. His appeal will be written not only by the side of the utterances of the great national leaders like Pericles and Cicero, or Washington and Lincoln, but also of great religious reformers as that of one of the immortal voices of the human race

in all that relates to the highest effort of men and nations.

The problem of the great man is an intriguing one, puzzled over by thinkers everywhere in the world. The Chinese democracy of reason answered it in terms offensive to our ears by the dictum that every great man is "a public calamity." No wonder there are some who will endorse this dictum with reference to Gandhi, though their number is a steadily diminishing one.

Civilisation is the power to renounce. It is control over selfishness, individual and corporate. It is peaceful co-operation. The tense situation in the world to-day is the result of the lack of cooperation on terms of justice and equality among the nations of the world. The present international anarchy is due to no small extent to the tragedy at Versailles which created sullen and discontented peoples. We cannot keep down proud and great peoples either in the West or in the East in perpetual humiliation and bondage and expect peace. Voltaire spoke with refreshing candour bordering on cynicism when he said "Such is the condition of human affairs that to wish for the greatness of one's own country is to wish for the harm of his neighbours." If India to-day wishes to govern herself, it cannot be said that she is out for doing someone else wrong. The Britishers to-day are in a very curious mood. The wish to have the best of both worlds, a reputation for idealism

and democracy and a strong grip on realism and self-interest. Nations like individuals wield lasting influence in human affairs by their devotion to an idea greater than their own self-interest, a purpose larger than their own immediate advantage. Let it not be said that if Providence threw India on Great Britain, Britain returned the compliment by throwing India back on Providence. For the sake of world peace and British prestige, it is to be hoped that the peace-loving, liberal-minded, section of Great Britain will realise that the days of paternalism are over and an empire is justified only because it is a partnership held together by the free consent of self-governing peoples.

When it is said that we get the government we deserve, it means that the State cannot be better than the men who compose it. There is an organic connection between the social conscience and the political arrangement. A more stable and representative government demands a juster social order. A society which tolerates the scourge of untouchability has no right to call itself civilised. There must not be any barrier to the rise of any honest, industrious and capable person to any position for which his character, his intelligence and his talents fit him. Integrity in public life should not be tampered with by caste or communal feeling. The pernicious influences at home and school which inculcate wrong notions about caste superiority and communal contempt require to be removed with a drastic hand. It is no answer to say that each one is

at liberty to follow his own customs and creeds but the decencies of social life require, not passive non-interference but active sympathy and understanding. It is true that we do not shoot or guillotine people and yet we do things pretty thoroughly in our own way by means of ostracism and social boycott. Hindus and Muslims have lived together for centuries and yet we cherish the most amazing illusions about each ether's characters. By the stubborn cherishing of differences, we develop attitudes which are exploited by the self-seeking and the partisan. "Are Tories born wicked," said a child to its Whig mother in the early 19th century, "or do they get wicked as they go on?" "They are born wicked, my dear, and they get worse." In our homes, we inoculate young and defenceless childern with such poison about each other. Our education, if it is successful, should protect us against passion and prejudice, and develop in us a resistance to the power of the press and progaganda to play on our weakness.

There can be no social stability without social justice. Democracy is not only political but economic also. Workers must be liberated from grinding toil, poverty and misery so that they may have opportunies for self-development and self-expression. We are certainly more sensitive to the suffering of starving millions and so have developed many philanthropic institutions, sometimes under communal auspices such as orphanages, free boarding for the destitute, hospitals for the sick and the suffering, and maternity homes for deserving

maidens. All this is excellent so far as it goes, but it is only dealing with the symptoms, not attacking the disease. If mankind cannot achieve something more satisfactory than the present order, our homes and hospitals only prolong our agony and it is better we starve and stop maternity.

Democratic states, if they are truly representative of the general will, are required to control the productive effort of individuals. The control of natural and economic resources cannot be left to the free play of individual competition. Even private enterprise clamours for state aid to prevent it from collapse. There is not, therefore, in our century much real opposition to the extension of the public ownership of monopolies except from vested interests. No society can exist without a large measure of social co-operation and control.

But, in no case is it right to surrender our central faith in the power of truth and love to break down resistance to our social endeavours. The social objective is to be gained by persuasion, not force and it should not involve any suppression of freedom of thought, speech and action, without which human life is deprived of its dignity and value. Social change must be an ordered development and not a violent and disruptive change. For this purpose, enlightened people should support policies which make for public good by educating opinion and propagating right ideas.

We live at a time when history is being remade. There is unrest in every sphere of life. There are con-

tradictions in aim, confusion of thought in every line. In religion we preach the highest philosophy and are victims of the worst superstition. We quote Plato and Sankara and believe in charms and amulets and offer sacrifices for passing examinations and winning prizes. The growth of national consciousness is retarded by communal separatism. We proclaim the equality of the Indian and the Britisher but the clash of the caste and the out-caste is growing more and more intense and bitter. Take the economic situation. If any one visits, say the city of Calcutta in the Christmas season, and finds out the amount spent on drink and dissipation, gambling and betting, he will not consider the people of the place to be by any means poor and yet the existence of the slums and those who live in them under conditions hardly to be borne are sad commentary on the utter economic chaos and injustice. The mass of poverty, the extent of illiteracy, the social obstacles in the way of improvement, the tangled undergrowth of vested interests, religious, political and economic, reveal not one problem but an infinity of problems. Many of us have an emotional apprehension of the vastness and complexity of the situation but what is required is a scientific view. There are no short cuts to their solution. Here is work for a number of University men and women, to disentangle the confused issues, to reconcile the conflicting aims, to melt the various influences for good into one supreme social effort which is essential to make men less selfish, less aggressive, less given to frivolity. It is for the Universities to produce men

who are able to stand out of the welter of common-place egoism and seek the public good, who have intellectual conscience to see the truth and the moral courage to pursue it. Man is not on earth to be happy. He is here to be honest, to be decent, to be good. Whether you get a prize post or not, it is open to you to be useful to your fellows and to work for truth, not because you hope to win but because your cause is just. Farewell !

His Highness the Nawab of Bhopal who holds a unique position among the Indian princes and is known for a lofty conception of duty, delivered his address at the University of Allahabad in 1936. He says that India is a country where educated people find it much easier to express themselves in a foreign language than in their own mother tongue. They know more about Wordsworth and Shelley and less of Tulsidas and Ghalib. It is all unnatural and the whole basis of the system of education is to be changed. He attaches due importance to playgrounds and remarks that he has learnt how to face the stern realities of life more on the playground than in the classroom. His is a timely message to students.

[This address was delivered by His Highness Sikander Saulat Iftikhar-ul-Mulk Nawab Hamidullah, G. C. S. I., G. C. I. E., Ruler of Bhopal, on December 5, 1935.]

I thank you most sincerely for the honour you have bestowed on me by inviting me to deliver the Convocation Address to-day in my own university. Many years ago when, on an occasion never to be forgotten by me, I entered the portals of this great university with a large crowd of other young men, all looking equally anxious, had some good fairy whispered to me that this honour would one day be mine, I confess, I would have walked to my seat in the examination hall with a firmer step and with greater confidence. But this Age of Iron, alas ! seems to have driven away all good fairies from our world, and humble mortals, such as I, are left alone and unaided to try in vain to pierce the Veil of Darkness which hides from us for all time that which is to come.

Gentlemen, I consider myself particularly fortunate to have been connected with two great seats of learning in these Provinces—for us from time immemorial the cradle of civilization. As the waters of the sacred Jamuna mingle with those of the Holy Ganges, so have the streams of two great civilizations—the Hindu and the Muslim—mingled here to produce that unique culture which has given to the world of art a new conception of beauty, and to the human soul a new philosophy. Of this culture we, the sons of India, are justly proud.

Situated as this university is in a place which has been for thousands of years a centre of devout pilgrimage, where the very earth has been hallowed by adoration and veneration, she is fortunate in possessing a background of tradition second to none in the whole world. For many years this university bore alone the heavy burden of guiding the education of the teeming millions that inhabit this part of India, and the heroic manner in which she discharged this duty has earned her of all time an honoured place in the annals of our land. To-day she is sharing this work with four other universities, but nothing can diminish the reverence in which all hold her as the first modern home of learning in these Provinces.

Gentlemen, as one who has been connected with educational work for a number of years, albeit in a modest way, the thought has often come to me that in view of the peculiar circumstances of our country, our universities have a twofold duty to perform. Not only have they to engage themselves in widening the horizon of knowledge, but they have also to adopt definite ways and means to instil in the hearts of their *alumni* that deep humanity which alone can be made a safe foundation for the future progress of such a country as ours.

Whereas in Europe universities have to deal mostly with one culture and one language, ours have to attempt the solution of intricate problems created by the presence within their walls of those that differ from

each other in race, culture, language and religion. In other words it would not be wrong to say that our universities are in the main, though in a small way, faced with the same problems with which our country as a whole is to-day faced. This to my mind enhances for us their utility assigns to them the noblest of all tasks—that of bringing real strength through unity to displace those divisions and animosities which, unfortunately, only too often hamper the spiritual and material progress of our mother land. To be able to discharge this noble duty adequately, our universities have to concern themselves more than they have hitherto done with their immediate environment, turning away from the temptation of shutting themselves up in that serene seclusion midst sylvan glades which was the cherished dream of educationists in the Middle Ages.

Human life has now become so complex, and human relationships so intertwined, that the universities of to-day can no longer afford to ignore the storm and stress of life that goes on around them. While doing their best to advance knowledge, they have also to step out into the arena of life to compel a harassed world to listen to the voice of reason, and to point out to struggling humanity the path that leads to safety and moral grandeur. If our universities fail to prove their worth in this manner, they will soon degenerate into lifeless institutions which devote themselves only to such remote matters as the correct classification of anti-diluvian fossils.

Here I feel that I must sound a note of warning lest I be misunderstood, and at the same time perpetrate a paradox, for which I crave your indulgence. Whilst I believe earnestly in the utility of universities, I do not believe that they should themselves preach an entirely utilitarian view of life. Idealism, provided it is not extravagant, is one of the most treasured attributes of the human mind, and seems to be in these days the only brake we possess with which to make the attempt to stop the onward rush of humanity towards brutality and mutual destruction. Thus I hold that our universities have not only to develop the intellect of their pupils, but also to do whatever is possible to form their character. Too often have we seen how dangerous to society an intellect uncontrolled by high moral principles can be.

In an age when one half of the world seems to be ranged in battle array against the other half, the development of character assumes the importance of a sacred duty for universities. If they send out into the world young men possessing balanced minds and a correct perspective of life, they for their part will have done their best to serve the cause of humanity. But if, on the other hand, they continue to believe that it is only with the development of intellect that they are concerned, then instead of being a blessing, they will become yet another menace to the well-being of human society.

Gentlemen, to me it has always seemed a debatable point whether the complete secularization of

education has not on the whole done more harm than good to society, and whether the time has not now come for us to consider the desirability of openly giving to religion, in the widest sense of the term, its old honoured place in our system of education. This besides being in consonance with the highest traditions of our country would also tend to re-establish in our inner life that harmony which is to-day so woefully absent from it.

Our universities have to be something more than mere imitations of similar institutions in other lands, and so long as they remain, as I am afraid they are at present, shyly conscious of the fact that they are imitations, they will not be able to regain that confidence in themselves without which they cannot become for us real sources of inspiration. Let us not forget that education is so organic a part of a nation's life that systems transplanted from other countries can never be anything more than exotic creations, and that a university that does not reflect correctly the best culture of her surroundings is doomed to dwindle into insignificance and, finally, to wither away like a plant that has failed to take root in the soil in which it was planted.

We in India stand to-day on the threshold of great changes, and it is time that we made a comprehensive survey of our present system of education and took steps to effect those modifications which we consider uecessary to ensure the best results. Bigger opportunities of serving our country are to be offered to the

young men of this generation and of succeeding generations than were offered to their predecessors, and in this test only those can prove successful who possess large hearts, high ideals and clear visions.

In planning the system of education hitherto followed by us, we seem to have unconsciously reversed the accepted order of things by trying to impart to our students a better knowledge of that which is far away than of that which is near them and round them. The majority of our educated young men to-day are apt to know more about the *cromlechs* found in England than about the *stupas* found in their own country ; more about Chaucer and Tennyson than about Kalidas and Ghalib ; and strangest of all, more about the English language than about their own mother tongue ! Ours is almost the only country in the world where educated people find it easier to express themselves in a language which is neither their mother tongue nor even one of the languages of their own country ! All this is unnatural, and has to be changed if the bases of our national life are to be strengthened.

Situated as we are, for no people is a careful study of their past as necessary as it is for us. Without it we can neither understand our present environment nor mould for ourselves a great future based on a sympathetic understanding of the origins and cultural contributions of the different races inhabiting our vast country. Mutual understanding alone will create mutual sympathy, and bring in its wake that healthy patriotism which, without being aggressive or offensive,

will remove for all time from our path the obstacles to-day offered by narrow sectarianism and differerences of castes and creeds. Our contribution to the general happiness of mankind will be great if we can show how it is possible for human beings, differing from each other in language, race and religion, to live together as one people united in the service of their mother land.

Gentlemen, I look forward to the day when from our country, which has ever been the home of religions and philosophies, there will again go forth into a distracted world, for the second time in our long history, that gospel of love and mutual toleration which alone can heal the wounds caused by recent conflicts and bring lasting peace to suffering humanity.

Turning to another aspect of life in our universities, I have been forced to come to the conclusion that our students as a whole do not pay as much attention to their physical well being as those in other countries. This is probably due to the fact that we in the East have been inclined to look upon games and other similar pastimes as something befitting only children, and, consequently, beneath the dignity of young men in search of knowledge. Then to make matters worse, at no stage in the process of education have we made adequate arrangements for teaching to our students those principles of hygiene and those methods of protecting themselves against diseases which in other countries are known even to young boys still at school.

It is too trite a remark to make, though nevertheless true, that in all sound systems of education it is the

physical well-being of the pupils that should come first. What our country needs most to-day is young men with strong nerves and broad shoulders—young men who would bear cheerfully the burden of such responsibilities as fall to the lot of all those engaged in constructive work.

I have ever held the belief that in nation-building playgrounds and gymnasiums occupy as important a place as class rooms. One has only to study those movements which are improving the health of the post-war generation in many countries of Europe to understand how much can be achieved by scientific physical culture. As time goes on, the struggle for existence is bound to become more acute throughout the world, and only those will be able to bear its strain that have strong nerves and strong bodies.

I have no hesitation in saying that personally I have learnt more on cricket fields and polo grounds how to face the difficulties of life than in class rooms, for, to keep smiling and to continue doing your best when you feel that all the odds are against you and your side is losing, is morally as great a discipline as any that can be taught by lectures.

The English, as you must have heard, have a saying that the battle of Waterloo was won on the playgrounds of Eton. All those that have had the good fortune of representing their university in different tournaments will understand what this saying is meant to convey, for they will know that in the realm of sport, where

the weakness of one is apt to become the weakness of all, no great success can be achieved without team work.

To you young men, who are leaving this university to-day, I say : Carry this team work also into the life that now lies before you. Go into the bigger world outside and, if you wish to render real service to our country, preach to all this doctrine of co-operation. Tell our countrymen that nothing that is to endure can ever be built on foundations of hatred and distrust, which, as purely destructive forces, can lead us nowhere. I assure you that at no juncture in our history was this spirit of co-operation more necessary than to-day, when the whole world is watching us to see what use we make of the opportunity to shape the destiny of our land which is now beginning to be offered to us by a radical change in our system of government.

Unfortunately, here is a sharp difference of opinion in our country with regard to these constitutional reforms. This was only to be expected in such a complex situation as ours, and should not disappoint us or make us adopt the purely negative attitude of belittling the result of an earnest attempt to solve one of the most difficult problems with which statesmanship has been faced in modern times. These reforms are by no means perfect. No one has ever put forward that claim. But what I do maintain is that they are not as wholly bad as some would have us believe. No critic, however severe, who studies them dispassionately can seriously make the statement that in their sum total they do not represent a substantial

advance. We wish they could have gone much further, but the undoubted difficulties that at present lie in the way cannot be ignored—difficulties for many of which, I am sorry to say, we have only ourselves to blame. To have ignored hard facts would have been of no help, for the best way to overcome them is always to face them boldly. In politics, as in many other spheres of life, one has to be prepared for compromise to achieve great results. If one cannot get the best, one must be ready to accept the second best. In the case of these reforms I feel confident that, given the necessary sincerity of purpose, we shall succeed in effectively overcoming that which to-day seems to us insurmountable.

So far as we of the States are concerned, rest assured that, as in the past so in the future, we shall ever consider it the greatest of all privileges to give of our very best to the building up of that greater India for which we are all longing.

The whole world is just now passing through extremely difficult times, and a supreme effort is necessary if we are to save ourselves from falling into that quagmire of political and economic uncertainties from which so many other nations are to-day trying in vain to extricate themselves. It is up to you, young men, as the custodians of the future of our country, to make this effort, and in this you will succeed only if you keep before you the motto of all true sportsmen: Be fair to every one and always chivalrous to the weak.

5.

Dr. Tagore in his address keeps his readers away from the much-talked of and hackneyed problem of unemployment. His address is poetry throughout and gives a very rhythmic expression of his views. He says that 'vidya' has been made a thing of market and 'is bought and sold according to the standard, of worldly profit'. His address is a moral lesson and tends to readjust our order of values. According to him the best function of education lies in letting students know themselves. The address has a unique appeal. It is futile to seek blemishes which count not in 'the general blaze of excellence'.

[Convocation address delivered by Dr. Rabindranath Tagore at the 17th Convocation of the Benares Hindu University, held on February 8, 1935.]

The call of invitation that has led me on to this platform to-day, though imperative in its demand, is, I must confess, foreign to my temperament. It speaks of a responsibility which I am compelled to acknowledge owing to my previous Karma that has identified me with a vocation specially belonging to that beneficent section of community which surely is not mine. Believe me, once upon a time I was young, in fact, younger than most of you; and in that early dawn of mind's first urge of expansion I instinctively chose my own true path which, I believe, was to give rhythmic expression to life on a colourful background of imagination. Pursuing the lure of dreams I spent my young days in a reckless adventure,—forcing verses through a rigid barricade of literary conventions. Such foolhardiness met with serious disapproval of the severely sober among the overripe minds of that epoch. If I had persisted exclusively in this inconsequential career of a versifier, you would not have ventured to ask such an unadulterated poet to take a conspicuous part on this solemn occasion when a great University has gathered her scholars to remind them of the high obligations associated with their success in college examinations.

However, towards the period of my declining youth, I took upon myself, for no ostensible reason whatever,

the deliberate mission of the teacher. This transformation in my life helped to unlock the gates to me at those institutions where my right of entry could legitimately be challenged. While enjoying the unaccustomed honour thus acquired I should confess to you that it was not a compelling sense of duty which guided me to this field of education but some long maturing ideals in my mind that constantly troubled my imagination claiming definite shapes. I have decided to speak to you about those ideals.

Before I broach my subject to-day I shall claim your indulgence in one or two points. It is evident to you that I have grown old, but you who are young cannot fully realise the limitations of old age. That I am not in a full possession of my breath may not be of any importance to others whose lungs are strong and whose hearts render loyal service to them without murmur. It may have a salutary effect upon me in curtailing the garrulity to which an old man's tongue has the habit to glide in. But what is more significant about a man who has crossed his seventieth year is that by that time he has concluded most of his opinions and thoughts and thus is compelled to repeat himself. This is one of the reasons why the young persons bored by his reiterations become naturally excited to a violent fit of contradiction which may be courteously suppressed and, therefore, all the more outrageous. But to save my energies I am ready to take the consequence and openly to plagiarize my own store of thoughts and even words.

I strongly suspect that you have missed them, for, not being in your text books, they must have remained beyond the reach of your serious attention, and I am confident that there is very little chance of your taking the trouble to explore them in obscure pages of publications generally overlooked by my countrymen.

In modern India centres of education have been established in large towns where the best part of energy and interest of the country is attracted. The constant flow of stimulation working upon our mind from its cosmic environment is denied us who are bred in towns. A great deal of the fundamental objects of knowledge with which Nature provides us free of cost is banished into printed pages and a spontaneous communication of sympathy with the great world which is intimately ours is barricaded against. I, who belong to the tribe of the born exiles, having been artificially nourished by "the stony hearted step-mother"—a modern city, keenly felt the torture of it when young and thus realised, when opportunity was given me the utmost necessity of Nature's own bounties for the proper development of children's mind. It helps me to imagine the main tragedy that I believe had overshadowed the life of the poet Kalidasa. Fortunately, for the scholars, he has left behind him no clear indication of his birthplace, and thus they have a subject that oblivious time has left amply vacant for an endless variety of disagreement. My scholarship does not pretend to go deep, but I remember having read somewhere that he was born in

Kashmir. Since then I have left off reading discussions about his birthplace for the fear of meeting with some learned contradiction equally convincing. Anyhow, it was perfectly in the fitness of things that Kalidas should be born in Kashmir,—and I envy him, for I was born in Calcutta. He was compelled to suffer an honorable banishment from there to a city in the plains,—and his whole poem of *Meghaduta* reverberates with the music of sorrow that had its crown of suffering "in remembering happier things." Is it not significant that in this poem, the lover's errant fancy, in the quest of the beloved who dwelt in the paradise of eternal beauty, lingered with a deliberate delay of enjoyment round every hill, stream, or forest over which it passed; watched the grateful dark eyes of the peasant girls welcoming the rain-laden clouds of June; listening to some village elder reciting under the banyan tree a well-known love-legend that ever remained fresh with the tears and smiles of generations of simple hearts? Do we not feel in all this the prisoner of the giant city revelling in a vision of joy that, in his imaginary journey, followed him from hill to hill, awaited him at every turn of the path which bore the finger-posts of heaven for separated lovers banished on the earth?

I wish to impress you with the fact that one of the noble functions of education is to reconcile our human mind with the world of Nature through perfect knowledge and enjoyment. The great universe surrounding us with endless aspects of the eternal in varied rhythms of colours, sounds and movements constantly mitigates

the pressure upon us of our small self along whose orbit whirl like meteors dense fragments of ephemeral interests. Education must have for its fulness an environment of a detached mind like the aerial atmosphere which envelopes the earth opening for her a path of communication with the infinite.

The *mantram* which I have accepted for my own purpose of life, and which carries within it in a concentrated form the true ideal of education is Infinite Peace, Infinite Well-being, the Infinite One.

Peace there is in the depth of the universe, the peace which is not of inertia, but for the constant reconciliation of contrary forces, the peace that reigns in the sphere of the stars among gigantic whirlpools of clashing flames. This spirit of a mighty peace we must win in our life through the training of self-control and balance of mind. Our individual beings are universes in a self-luminous field of consciousness; they have their instincts and desires as inflammatory elements which should be brought under control to be coerced into perfect creations. I was about to say that these were universes in miniature, but I hesitated when I realised that spiritual entity cannot be measured by a criterion which is that of spatial expansions. Also we cannot be certain about time limits of those realms just as we are doubtful about those of the suns and stars. In fact there, is a strong reason in favour of their being eternal pilgrims passing through countless cycles of renewal, but for which the whole world would have gone out of existence long before this.

The human spirit whose highest aim is to realise itself in the supreme Spirit, in its progress towards finality is enjoined by our scriptures to choose for its initial stage *Brahmacharyya*, the stage of self-discipline. This is in order that it can be established in the heart of *Shantam*, in the infinity of detachment. The basis of education has to be acquired in this *Shantam*, the harmony of the soul in its unobstructed sense of the Eternal The idea of pilgrimage that prevails in India has the same educational meaning. Its sites have been specially selected where nature reveals overwhelming magnanimity in its aspect of the beautiful and the grand. There at the touch of the ineffable our worldly experiences lose their tenacious grip of immediacy and life's truth is rescued into the light from the density of entanglements.

There is another pilgrimage for us which is in the world of knowledge. This journey in the open road gives us emancipation not only from illusions of appearance and peremptoriness of the prevalent unreason, but also from wrong valuations of reality, from all kinds of bias that obscure our vision of truth, from the enchainment in the narrow cage of provincialism. It is a strenuous walk, every step of which has to be carefully taken with a solemn eagerness for the truth which is to be its goal. There was a time when the University had its origin in man's faith, in the ultimate value of culture which he pursued for its own sake But, unfortunately, in the modern days greed has found its easy access into

the sacred shrine dedicated to the cause of mind's fulfilment. The sordid spirit of success has allowed the educational institutions to be annexed to the busy market where *Vidya* is bought and sold according to the standard of worldly profit, where cheap facilities are offered for acquiring, in place of true education, its make-believe substitute.

It is fully worthwhile to emphasize the truth that the ultimate purpose of education is to enable us to live a complete life which can be realised through our complete unity with existence, a part of which consists of the physical nature and the other part that of the human community. For us the world of nature has no reciprocal path of union which may be termed as moral. Its manifestations in the predestined course of activities take no heed of our conduct or necessity, make no distinction between the good and the evil. The human relationship with the blind forces combining in an eternal game of creation, indifferent to our personal cry, can only be established through our own impersonal faculty of reason whose logic is universal. By understanding Nature's laws and modulating them to our needs we reach the *Shantam* in the extra-human world, the *Shantam* which is the fundamental principle of harmony. Such an adjustment of Nature's workings to human intelligence has been progressing from the beginning of Man's history, and according to the degree of that progress, we judge that department of our civilisation which we generalise, very often wrongly, as materialistic.

The Supreme Being, says the Upanishad, has to be realised with our heart and mind as well, as Visvakarma and as *Mahatma sada jananam hrdaye sannivishtah.* His name Visvakarma implies laws that are universal through which his activities in the physical world are revealed. They would elude our reason if they were expressions of a capricious will, then we could never depend upon the inevitableness of their influences upon our destiny, the influences which can only be turned to our favour if we have perfect knowledge of them. There are individuals even to-day who believe in some happenings in nature which are arbitary and local, which ignore all the endless links of causes that keep the world in order. They imagine that the physical phenomena are liable to sudden outbreaks of catastrophic chasms which are like special ordinances orginating in isolated causes. Faith in such cosmic arbitrariness drives men to the primitive mentality of fear, to unmeaning ritualism, to imputations of special purpose upon natural events according to one's own personal tendencies of mind. We ought to know that numerous evils which in olden days were considered as punitive weapons in the arsenal of God have been tamed to innocuousness through accurate comprehension of their character.

It has been said in our scripture that *avidya* which means ignorance is the root cause of all evils, the ignorance which blinds us to the truth of the unity of our self with the not-self.

Man's *sadhana* for his union which nature depends for its success upon his faith in his reason and his dis-

interested endeavour in an atmosphere of detachment. A perfect technique of such a training is largely found in the West, and there the people are fast assimilating in their own power the power that lies in *Anna Brahma*, the infinity manifested in matter. In fact, they are gradually extending their own physical body into the larger body of the physical world. Their senses are constantly being augmented in power, their bodily movements allied to nature's forces of speed. Every day proofs are multiplied convincing them that there is no end to such intimacy leading to the extension of their self in the realm of time and space. This is the true means of realising Visvakarma, the universal worker, by a mind divested of all doubts and by action.

Shantam, the spirit of peace, which can be attained through the realisation of truth, is not the whole object of education ; it needs for its finality Shivam, Goodness, through the training of moral perfection, for the sake of the perfect harmony with the human world.

The greatness which man has reached in the expansion of the physical and intellectual possibilities in him shows no doubt, a great advancement in the course of his evolution. Yet, in its lop-sided emphasis it carries the course of *avidya*, the mother of all sufferings and futility, *avidya* which obscures the warning for him that his individual self when isolated from all other selves misses its reality and, therefore, suffers unhappiness, just as his physical body is thwarted in its function when out of harmony with the physical world.

The union of our self with Brahma as ***Visvakarma*** may bring us success in the province of living, but for the peace and perfection in the realm of our being we need our union with Brahma who is Mahatma, the Infinite Spirit dwelling in the hearts of all peoples.

With the modern facilities of communication not merely a limited number of individuals but all the races of men have come close to each ether. If they fail to unite in truth then humanity will flounder in the bottom of a surging sea of mutual hatred and suspicion. Things to-day have already assumed an angry temper of a growling beastliness ready for an enormous catastrophe of suicide.

Most problems to-day have become international problems and yet the international mind has not yet been formed, the modern teachers' conscience not having taken its responsibility in helping to invoke it.

The word "international" may sound too indefinite, its meaning appearing large only because of its vagueness, like water acquiring volume by turning into vapour. I do not believe in an internationalism which is amorphous, whose features are broadened into flatness. With us it must be internationalism of India, with its own distinct character.

The true universal finds its manifestation in the individuality which is true. Beauty is universal, and a rose reveals it because, as a rose, it is individually beautiful. By making a decoction of a rose, jasmine and lotus

you do not get to a realisation of some larger beauty which is interfloral. The true universalism is not in the breaking down of the walls of one's own house, but in the offering of hospitality to one's guests and neighbours.

Like the position of the earth in the course of its diurnal and annual motions, man's life, at any time, must be the reconciliation of its two movements, one round the centre of its own personality, and another whose centre is in a luminous ideal comprehending the whole human world. The international endeavour of a people must carry the movement of the people's own personality round the great spirit of man. The inspiration must be its own, which is to help it in its aspiration towards fulfilment. Otherwise, mere cosmopolitanism but drifts on the waves, buffeted by wind from all quarters, in an imbecility of movement which has no progress.

As a people we must be fully conscious of what we are. It is a truism to say that the consciousness of the unity of a people implies the knowledge of its parts as well of its whole. But, most of us not only have no such knowledge of India, they do not even have an eager desire to cultivate it.

By asserting our national unity with vehemence in our political propaganda, we assure ourselves that we possess it, and thus continue to live in a make-believe world of political day-dreams.

The fact is, we have a feeble human interest in our own country. We love to talk about politics and economics ; we are ready to soar into the thin air of academic abstractions, or roam in the dusk of pedantic wildernesses ; but we never care to cross our social boundaries and come to the door of our neighbouring communities, personally to enquire how they think and feel and express themselves, and how they fashion their lives.

The love of man has its own hunger for knowing. Even if we lack this concerning our fellow beings in India, except in our political protestations, at least love of knowledge for its own sake could have brought us close to each other. But there also we have failed and suffered. For weakness of knowledge is the foundation of weakness of power. Until India becomes fully distinct in our mind, we can never gain her in truth ; and where truth is imperfect, love can never have its full sway. The best function of our Education Centres is to help us to *know* ourselves ; and then along with it, her other mission will be fulfilled which is to inspire us to *give* ourselves.

What has given such enormous intellectual power to Europe is her co-ordination of minds. She has evolved a means by which all countries of that continent can think together. Such a great concert of ideas, by its own pressure of movement, naturally wears away all her individual aberrations of thought and extravagances of unreason. It keeps her flights of fancy close to the

limits of reticence. All her different thought rays have been focussed in our common culture, which finds its complete expression in all the European universities.

The mind of India, on the other hand, is divided and scattered ; there is no one common pathway along which we can reach it. We cannot but look with regret at the feebleness of stimulation in our academic training for the forming of our mind which in co-operation of knowledge and sympathy may comprehend the larger mind of the country. The most important object of our educational institutions is to help each student to realise his personality, as an individual representing his people, in such broad spirit, that he may know how it is the most important fact of his life for him to have been born to the great world of man.

We in India are unfortunate in not having the chance to give expression to the best in us in creating intimate relations with the powerful peoples of the world. The bond between the nations to-day is made of the links of mutual menace, its strength depending upon the force of panic, and leading to an enormous waste of resources in a competition of browbeating and bluff. Some great voice is waiting to be heard which will usher in the sacred light of truth in the dark region of the nightmare of politics. But we in India have not yet had the chance. Yet we have our own human voice which truth demands. Even in the region where we are not invited to act we have our right to judge and to guide the mind

of man to a proper point of view, to the vision of ideality in the heart of the real.

The activity represented in human education is a world-wide one, it is a great movement of universal co-operation interlinked by different ages and countries. And India, though defeated in her political destiny, has her responsibility to hold up the cause of truth, even to cry in the wilderness, and offer her lessons to the world in the best gifts which she could produce. The messengers of truth have ever joined their hands across centuries, across the seas, across historical barriers, and they help to form the great continent of human brotherhood. Education in all its different forms and channels has its ultimate purpose in the evolving of a luminous sphere of human mind from the nebula that has been rushing round ages to find in itself an eternal centre of unity. We individuals, however small may be our power, and whatever corner of the world we may belong to, have the claim upon us to add to the light of the consciousness that comprehends all humanity. And for this cause I ask your co-operation, not merely because co-operation itself is the best aspect of the truth we represent, it is an end and not merely the means.

We are new converts to western ideals, in other words, the ideals belonging to the scientific view of life and the world. This is great and it is foolish to belittle its importance by wrongly describing it as materialism. For Truth is spiritual in itself, and truly materialistic is the mind of the animal which is unscientific and

therefore unable to cross the dark screen of appearance, of accidents, and reach the deeper region of universal laws. Science means intellectual probity in our dealings with the material world. This conscientiousness of mind is spiritual, for it never judges its results by the standard of external profits. But in science the oft-used half truth that honesty is the best policy has proved itself to be completely true. Science being mind's honesty in its relation to the physical universe never fails to bring us the best profit for our living. And mischief finds its entry through this backdoor of utility, and Satan has had an ample chance of making use of the divine fruit of knowledge for bringing shame upon humanity. Science as the best policy is tempting the primitive in man bringing out his evil passions through the respectable cover that it has supplied him. And this is why it is all the more needed to-day that w should have faith in ideals that have been matured in the spiritual field through ages of human endeavour for perfection, the golden crops that have developed in different forms and in different soils but whose food value for man's spirit has the same composition. These are not for the local markets but for universal hospitality, for sharing life's treasure with each other and realising that human civilization is a spiritual feast the invitation to which is open to all, it is never for the ravenous orgies of carnage where the food and the feeders are being torn to pieces.

The legends of nearly all human races carry man's faith in a golden age which appeared as the introduc-

tory chapter in human civilization. It shows that man has his instinctive belief in the objectivity of spiritual ideals though this cannot be proved. It seems to him that they have already been given to him and that this gift has to be proved through his history of effort against obstacles. The idea of millenium so often laughed at by the clever is treasured as the best asset by man in his mythology as a complete truth realised for ever in some ageless time. Admitting that it is not a scientifical fact we must at the same time know that the instinct cradled and nourished in these primitive stories has its eternal meaning. It is like the instinct of a chick which dimly feels that an infinite world of freedom is already given to it, that it is not a subjective dream but an objective reality, even truer than its life within the egg. If a chick has a rationalistic tendency of mind it ought not to believe in a freedom which is difficult to imagine and contradictory to all its experience, but all the same it cannot help pecking at its shell, and ever accepting it as ultimate. The human soul confined in its limitation has also dreamt of a millenium and striven for an emancipation which seems impossible of attainment, and it has felt its reverence for some great source of inspiration in which all its experience of the true, good and beautiful finds its reality though it cannot be proved, the reality in which our aspiration for freedom in truth, freedom in love, freedom in the unity of man is ideally realised for ever.

Sir P. C. Ray, a great scientist and a man who has dedicated his life to the service of others, in the course of his address says that the majority of great men have never been to colleges, and he does not think that the class-room lectures are of much importance. He feels that a sincere boy outside the class-room can learn more than inside it. He is not satisfied with the current system of education. In his opinion compulsory lecture system in the Universities is a great defect. He emphasises the fact that the medium of instruction should be the vernacular and that every Tom, Dick and Harry is not to be allowed admission in universities, which should admit only those judged to be fit for higher education. "Let those alone seek the portals of academy who are prepared to dedicate their lives to the enlargement of the bounds of knowledge." It is a remarkable address and affords interesting reading. The address contains very relevant and striking quotations and it is a great pleasure to go through it.

[This address was delivered by Sir P. C. Ray at the convocation of the Benares Hindu University on the 11th of December, 1933.]

.....................If we begin by critically examining our methods in India (not only in your University) the first outrage that we find we committed was in making a foreign language our vehicle of instruction. It is surprising that this principal reason for our intellectual sterility was not discovered till very recently, and it is still more surprising to find that some of the well-known educationists of the time continue to regard this relegation of the English language to an inferrior position as fraught with disastrous consequences. To avoid misconception, I must here, once for all, make it clear that the study of English or other important foreign languages is by no means discouraged; they open up newer vistas of thoughts and ideals; there is no need of entertaining the fear that the language in which Shakespeare and Milton wrote will be left uncultivated. Only it must not be looked upon as the medium of instruction. A man of education must, in the first place, be one well up in all-round information, and he can gather it best and in the minimum of time if he does so in a language he learned to lisp in, while sucking his mother's breast—the language of his nursery. Arithmetic, History, Economics, Politics, Logic and Geography, in short, the book of knowledge, can readily be mastered in one's own vernacular. That should be the first stone in our educational edifice if we want to build well and high.

Gustave Le Bon, in the course of a psychological study on the overproduction of graduates, observes :

"The primary danger of this system of education very properly qualified as Latin consists in the fact that it is based on the fundamental psychological error that the intelligence is developed by the learning by heart of text-books. Adopting this view, the endeavour has been made to enforce a knowledge of as many hand-books as possible. From the primary school till he leaves the university a young man does no thing but acquire books by heart without his judgment or personal initiative being ever called into play. Education consists for him in reciting by heart and obeying.

It gives those who have been submitted to it a violent dislike to the state of life in which they were born, and an intense desire to escape from it. The working man no longer wishes to remain a working man, or the peasant to continue a peasant, while the most humble members of the middle classes admit of no possible career for their sons except that of State-paid functionaries. Instead of preparing men for life French schools solely prepare them to occupy public functions, in which success can be attained without any necessity for self-direction or the exhibition of the least glimmer of personal initiative. At the bottom of the social ladder the system creates an army of proletarians discontented with their lot and always ready to revolt, while at the summit it brings into being a

frivolous bourgeois, at once sceptical and credulous, having a superstitious confidence in the State, whom it regards as a sort of Providence, but without forgetting to display towards it a ceaseless hostility, always laying its own faults to the door of the Government, and incapable of the least enterprise without the intervention of the authorities.

The State, which manufactures by dint of text-books all these persons possessing diplomas, can only utilise a small number of them, and is forced to leave the others without employment. It is obliged in consequence to resign itself to feeding the first-mentioned and to having the others as its enemies. From the top to the bottom of the social pyramid, from the humblest clerk to the professor and the prefect, the immense mass of persons boasting diplomas besiege the professions. While a business man has the greatest difficulty in finding an agent to represent him in the colonies, thousands of candidates solicit the most modest official posts. There are 20,000 school masters and mistresses without employment in the department of the Seine alone, all of the persons who, disdaining the fields or the workshops, look to the State for their livelihood. The number of the chosen being restricted that of the discontented is perforce immense. The latter are ready for any revolution, whoever be its chiefs and whatever the goal they aim at. The acquisition of knowledge for which no use can be found is a sure method of driving a man to revolt."

"It is evidently too late to retrace our steps. Experience alone, that supreme educator of peoples, will be at pains to show us our mistake. It alone will be powerful enough to prove the necessity of replacing our odious text-books and our pitiable examinations by industrial insruction capable of inducing our young men to return to the fields, to the workshop, and to the colonial enterprise which they avoid to-day at all costs." Remember, Le Bon wrote the above some 40 years ago.

Dr. Hankin, late Chemical Examiner to the U. P. Government in his *Limitations of the Expert* says :—

"Stephen Leacock thus sums up his experience as a schoolmaster in Canada :—"I have noted that of my pupils those who seemed the laziest and the least enamoured of books are now rising to eminence at the bar, in business, and in public life ; the really promising boys who took all the prizes are now able with difficulty to earn the wages of a clerk in a summer hotel or a deck-hand in a canal boat."

"An acquaintance who had been to a certain school, told me, it was notorious, that the education there, was so good that its boys were constantly getting scholarships and exhibitions at the universities. But it was also notorious that one never seemed to hear of them afterwards."

"Many instances have been adduced of highly developed business ability in badly educated persons and we have even found reasons for suspecting that

education, despite its advantages in other respects, checks the development of the business instinct."

"Edison has made a great deal of money by his discoveries. He cannot, however, be described as a typical expert. He lacked the ordinary education of an expert. As a child he was "rather wanting in ordinary acumen" but was highly inquisitive and has an extraordinary retentive memory. He had three months' schooling only."

"Cecil Rhodes once said that college dons are babes in financial matters".

"The College education means forming habits of indolence, acquiring an unwarranted sense of superiority or becoming dissatisfied with circumstances and environment in which one's lot is cast" says Rockfeller, the greatest of the modern businessmen.

If one took a census of the greatest of world's men and women, I fear he wouldbe surprised to discover that the majority of them owe very little to Universities or indeed to any educational system. Shakespeare knew little Greek and less Latin. Our Keshab Chandra Sen and Rabindra Nath, Sarat Chandra Chatterjee, the prince of novelists and story-writers, Girish Chandra Ghose, the foremost of our dramatists, never crossed the threshold of the University. I may also add the names of Bernard Shaw, H. G. Wells and the Nobel Prize winner of the present year, namely, Ivan Alex Bunin, all of whom

were self-educated. Then again the great rulers and statesmen of Europe who hold the destiny of the world in the hollow of their palm—Ramsay Macdonald, Mussolini, Hitler and Stalin have also been innocent of College education. Nor need I mention the names of Abraham Lincoln and others who born in the log cabin in the backwoods of America rose to be the proud occupants of the White House. In the second Labour Ministry most of the Cabinet ministers began as day labourers who in the evenings by self-tuitions gathered learning.

Every one will admit that with an improved and broadened form of secondary education, the functions of the Universities will be stripped of many of their unnecessary appendages, making thus for real progress. The mechanical portion of training, which ought really to be finished in the school stage, but which unfortunately is carried on to the University forms, will then greatly disappear and make these Universities real centres of learning and culture. I fear a good deal of explanation is necessary at this point, mainly because the present University system is as yet so full of routine details that its function is not very far removed from that of a Secondary School.

No doubt the lecture system gives an appearance of work, but if the student is himself willing to utilise his time, he would in most cases find that he gets through more work by absenting himself from these compulsory lectures. Adopting as his text the dictum of Carlyle

that the modern University is a University of books, Mr. H. G. Wells says:

Just consider the opposite system where the student is only given the names of some books and some questions on the problems dealt therein ; he reads them, digest them and develops his own answe rs to the questions by a process of thinking which is his own, and then in the College Seminar discusses them from his own point of view with his collegues and professors, preferably in limited groups. I am sure under these circumstances his powers of analysis as well as synthesis be better developed, and his efforts, though irksome in the beginning, will soon enable him to curve out his own intellectual empire. All these, however, presuppose a sound secondary education based upon his vernacular.

I have pointed out some of the main defects of our University educational system : *the medium of study*, *the absence of elimination*, *the svstem of compulsory lectures*, and *the nonparticpation of students in the organisation.*

Whilst, on the one hand, therefore, the charge of handling mediocrity in the University system is not altogether unfounded, the current Emersonian aphorism that 'Universities are hostile to genius', is, on the other hand, not wholly justifiable. Whilst Universities should be anxious to invite real workers for human progress, we on our part should see that they are rendered independent todo so. I may quote from Mr. Wells, 'they (future Universities) will offer no general education at all, no graduation in arts or science or wisdom. The only

students who will come to them will be young people who want to work in close relation as assistants, secretaries, special pupils, collateral investigators with the devoted and distinguished men whose results are teaching all the world.'

I am not out to preach a jeremiad against University education altogether. Ever since the delivery of my Mysore University convocation address in 1926 and even before that, I have been harping on the insane craze for University degrees and its baneful effects. "The Universities are overcrowded with men who are not profiting either intellectually or materially by their University training," is the finding of the Indian statutory (Hartog) Commission.

I only plead for a considerable elimination of candidates in the process of selection. An all round education should be imparted to the majority of the students in the secondary stage through the medium of the vernacular. This will correspond to the "school final" in England. No one should choose a University career unless he feels that he has an instinctive call in that direction. A University should be a centre of scholarship, research and culture. Let those alone seek the portals of the academy who are prepared to dedicate their lives to the enlargement of the bounds of knowledge.

Laski observes in his *Dangers of Obedience* : "I have no use for the lecture that is a mere substitute for books. The University has failed when its students are not

aroused to passionate discussions among themselves or when the work they do fails to awaken them to the study of great books "The student who is satisfied with pemmicanized knowledge has gone through the University with his mind closed ; he has eaten facts, but not digested them."

Cardinal Newman very properly observes : "It is, I believe, as a matter of history, the business of a University to make the intellectual culture its direct scope, or to employ itself in the education of the intellect.

It is no doubt one of the main functions of the University to promote culture, but at the same time we must be on our guard. Says Alfred Zimmern :

"Culture is an element making for grace, promotion, and harmony in human spirit. But if any criticism is to be levelled at the ideal and the processes of culture it is surely just this—that they may tend to fix men unduly in stereotyped ways of thinking and feeling, minstering to a self-satisfaction which inhibits initiative rather than stimulating them to fresh efforts with all the possible conflicts involved. In other words, culture is apt to be confounded with sanctions crystallised by use. Then again he refers to the memorable description in Renan's St. Paul of those models of classical culture, the Athenian Professors, to whom the apostle addressed in vain the Word of Life. Athens, at the point to which it has been brought after centuries of development, a city of grammarians, of gymnasts and of teachers of

sword-play, was as ill-disposed as possible to receive Christianity. The banality and inward dryness of the schoolman are irremediable sins in the eyes of grace. The pedagogue is the most difficult of men to convert for he has his own religion, which consists in his routine, his faith in his old authors, his taste for literary exercises ; this contents him and extinguishes every other need." This is also the opinion of Bertrand Russell.

Atque inter silvas Academi quærere verum (in the groves of the Academy search truth) thus sang the Latin poet. In ancient India and to certain extent in the *Tols* of mediaeval and modern India, the disciples in *asram* of the preceptor (guru) while tending cows, collecting fuel and doing all manner of household drugery used to get lessons on eternal verities : witness the sublime and transcendental discussions in the *Vrihadaranyaka Upanishad*. The very word *aranayaka* (*i.e.*, in the forest) reminds us of the groves of Plato. I am afraid, in the mad and insensate imitation of the west—in attaching palatial, residential quarters to our Universities with all the amenities of modern luxuries, we are doing incalculable harm. We are turning out helpless nincompoops utterly unfit to face the matter-of-fact world. This fact should not be overlooked by our educationists. May the University steer clear of these shoals.

7.

Pandit Malaviya is a great educationist and a renowned warrior for the cause of India's freedom. But he would be remembered more for the services which he has rendered for the progress of education than for his political activities. His name will be written for these services on "the imperishable rock of time." In his address he does not advocate a reduction in the number of universities, but on the other hand, rejoices at their growth in India. He has the eye and the pen of an artist and has turned every day observations into most sublime and lovely descriptions. He narrates the difficulties that beset the students of India owing to a foreign language being the medium of instruction and the time which is wasted in learning it; but he does not forget the utility of the English language and the good it has done.

[Pandit Madan Mohan Malaviya, delivered the following address at the Annual Convocation of the Benares Hindu University, on December 14, 1929.]

......................I have said that the establishment of so many Universities in the course of a few years is a matter of national gratification. But I regret to find that there is a tendency in some quarters to look askance at the development of Universities in India. There are some who think that they are growing too fast and that more is being spent on University education in India than should be spent. This is a mistaken view. One has only to think of the large number of Universities in Great Britain, in Germany, in France, in Italy, not to speak of America, to understand that for the vast continent of India, which is equal to the whole of Europe minus Russia, 18 Universities are none too many, and I venture to think that this is the view which is taken by every scholar who is capable of taking a statesmanlike view of this question. University education has come to be regarded in every civilized country as the most important part of a national system of education, and if the expense incurred on University education in the West is compared with what we are expending on it here, it will be seen that we are far below the standard of other civilized countries and have much lee-way to make up. Our Universities are like so many power-houses, needed to scatter the darkness of ignorance, poverty and cold misery which hanging like a pall upon the country. The larger the

number of well-educated scholars the Universities will send out, the greater will be the strength of the national army which is to combat ignorance and to spread knowledge. Every lover of India must therefore rejoice at the growth of Universities in India.

But it is said that we do not get sufficient value for the money which is being spent on Universities, that they are not turning out work of the right type to justify the expense, that University standards in India are low, that the standard of admission is unsatisfactory, and that, therefore, efficiency is sacrificed and much educational power is wasted.

I admit that this criticism is partly true. I unhasitatingly admit that, some brilliant exceptions apart, the Indian intellect cannot, under existing conditions, produce the best results of which it is capable. Indeed it is highly creditable to Indian graduates that, despite the discouraging conditions under which they live and work, they have rendered so good an account of themselves in competitions both in India and in England as they have done. To understand how we may get better value for the money and labour we spend on Universities, we must pass in review our whole system of Education, we must note all its defects and deficiencies, and the obstacles which lie in the path of Indian Universities.

It is an obvious truth that the standard of University education depends directly upon the standard of

secondary education. If you wish to raise the former, you must raise the latter. But you can do this only when primary education has been organized on a sufficiently sound and extensive basis. Bearing this in mind, let us recall what the state of education in India is and let us compare it with the systems which obtain in other lands. Let us take the case of England. For sixty years England has sedulously promoted universal education among its people. In 1870 the Elementary Education Act made elementary education compulsory. The Act of 1891 made it free. Since that time elementary education has been both free and compulsory for all boys and girls up to the age of 14. Compulsory education is split into three grades: (1) Infant grade, 5 to 8 years; (2) elementary or primary grade, 8 to 11 years, (3) Higher primary grade, which is sometimes called secondary education, 11 to 14 years. The secondary schools prepare students for the University matriculation examination, and encourage them by special grants to continue their studies for special courses. There are 60 public schools which are regarded as of the first rank, which have a reputation for building up character and preparing young men for administrative appointments. There are over a thousand other secondary schools. Since the War a new type of schools called the Central School has come into existence. They take in boys and girls at the age of 11, on the result of a competitive examination, and impart free instruction. They are day schools. They divide their courses in groups, the commercial group, the technical

group and the industrial group. The present-day tendency in England is to include technical subjects in the scope of general education and to obliterate the distinction between primary, secondary and technical schools. But there is at present a net-work of part-time, wholetime and evening schools and technical schools, and there are technical colleges for advanced technology. In these schools a variety of technical and professional courses are offered to suit the particular bent of each student. In addition to these there are polytechnics which prepare the lower middle and the working classes for various industries and trade which require skilled labour. They offer training in every industry which exists in the locality. There are also technical institutes which offer teaching in specialized subjects. Polytechnics also provide teaching in ordinary arts and sciences for university degrees. On the top of these institutions, stand the Universities of which there are 16 in number* A large number of scholarships is given in secondary schools to encourage promising pupils to prepare themselves to join the Universities. It will be evident from this how much care is taken in England to see that every child receives the education for which he is naturally fitted. In all important countries of the West similar steps have been taken, and the systems of primary and secondary education have been overhauled, enriched and put on a sound footing.

***I have taken much of this information from my friend, Dr. Ziauddin Ahmad's valuable publication on Systems of Education.**

Let me give you some idea of the provisions that have been made in the last ten years in those countries to help the youth and the cause of education. Having imporved their respective systems of primary, secondary and technical education, they have introduced a system of vocational guidance, which has been defined as "the giving of information, experience and advice in regard to choosing an occupation, preparing for it, entering it, and progressing in it." They have created Committees of School masters and others, and Juvenile Employment Exchanges and Bureaus to advise boys and girls after they leave the School as to the career they should enter upon. They do not think that they have discharged their duty to the child when they have passed him through the School. In all these countries the interest in the child has been extended to preparing him for occupational life and to securing him employment which may be suitable to him. Thus in Austria, in 1922, an order of the State Education Office stated : "It is the duty of the School not only to provide suitable instruction and education for the children who attend it, but also to advise parents as to the future careers of their children and as to the choice of an occupation." A French writer, F. Buisson, quoted by Proof. Shields in his book on the "Evolution of Industrial Organisations" wrote in 1921 : "The school is not made for the school, but for life. It must provide the society of the future with men. It is a cruel mockery suddenly to abandon its little pupils on the day they reach their thirteenth year, when they

are flung unarmed into the battle ot life. It is also the most foolish waste. What madness, having done so much for the school boy, to do nothing for the apprentice! From this has arisen the idea, which has rapidly spread, that the social functions of the school must be greatly extended. There are many new services which it must give, The first of these is the supervision of the transition from the school room to the workshop." In England and Wales, vocational guidance has been provided for since the Education (Choice of Employment) Act was passed in 1910 for giving advice to boys and girls under the age of 17 (extended to 18 by the Education Act, 1918) with respect to the choice of suitable employment. So also in the Irish Free State, in France, in Belgium, in Germany, and in the United States, where probably the first systematic attempt to provide vocational guidance was undertaken in 1908.

This will give you some idea of the amount of care which is bestowed in England and in other civilized countries on the proper education of the child. Every civilized Gorvernment reagards it its duty to educate the child, and to educate him in such a manner that he should be able to earn a suitable living. During the ten years since the War, every civilized country has endeavoured to give a more parctical bias to education. After six year of experiment Austria-Vienna in 1927 completely re-organized its school system. By 1928 Chile had reduced illiteracy to less than 30 per

cent. of the population of four and a half millions, and nearly one-seventh were at educational institutions of some kind. Vocational training has been introduced in the third year of the secondary school, and experimental schools and courses have been established and a system of model schools is to be created to determine the type best suited to Chile. In Hamburg schools are being turned into community centres, parents' co-operation enlisted, and self-Government employed. The aim of present Swedish Education is to fit young people for citizenship and to develop their whole personality. In 1918 a whole system of practical education for young people was created and is vigorously at work. In Turkey since the War the old system of religious schools has been discontinued, and a democratic secular, modern and national system of education has been put into practice to fit the country's new conditions. The number of schools has been largely increased, all education made free, opportunity for self-government given everywhere, and the activity plan put in operation into the first three years of elementary school. It is hardly necessary for me to remind you of the progress of education in France and Germany, America and Japan. The progress of their commerce and industries, the prosperity, power and happiness which they enjoy is in the largest measure due to the education which they have imparted to their sons and daughters during the last fifty years and more.

Let us turn now to our own country. What do we find here? As has well been pointed out by a distin-

guished English scholar, there is no country where the love of learning had so early an origin or has exercised so powerful an influence as India. Yet after nearly a hundred and seventy years of British rule, India is still stepped in ignorance. According to official reports the percentage of literates of both sexes and all ages was only 7·2, in 1921. In 1927 only 6·91 per cent. of the male population and only 1·46 per cent. of the female population were at school. The total attendance in all the schools and colleges in India in 1921-22 was 7½ million. Of this, about 5 million were in the first class (including the infant class) of the primary schools, and the remaining one-third was distributed among the remaining three classes of the primary schools and among all the other educational institutions including Universities and Colleges. The majority of the boys drop off in the first class and only 19 per cent. of those who join the first class of Primary Schools actually reach the fourth class. Children in the first class cannot read and write the little they learn is soon forgotten. There is loud wail in a recent official report that the wastage and stagnation which these figures reveal are appalling.

Where provision for primary education is so utterly inadequate, it would be unwise to expect any system of night schools or continuation schools for adult education.

Secondary schools also are inadequate in number and poor in the quality of education they impart. The standard of general education they provide is much below that which obtains in other countries and which is

needed to give the education a practical value. They are also deficient in that they offer only a general and not vocational education. There are a few agricultural, commercial, technical and industrial schools. They are poor both in number and quality. We look in vain for alternative groups of courses in agriculture, commerce and industry such as the Central Schools in England provide. The official report, to which I have referred, says with regard to secondary schools: "The immense number of failures at matriculation and in the university examinations indicates a general waste of effort. Such attempts as have been made to provide vocational and industrial training have little contact with the educational system and are therefore largely infructuous."

Universities may be likened unto trees, the roots of which lie deep in the primary schools, and which derive their sap and strength through the secondary schools. Where both are woefully deficient and defective, where there is no diverting of students to vocational courses, where, speaking generally, every student is forced to adopt one general course which leaves him unfit for anything except clerical service of a very poor kind, it is not surprising that Universities have been hampered in their work by admitting "students who are not fitted by capacity for University education, and of whom many would be far more likely to succeed in other careers." In the circumstances that obtain at present, Universities cannot be expected to secure and maintain such a general high standard as they would naturally desire to. Indeed,

it is a wonder that with all the handicaps under which they have laboured they have been able to show such good results as they have shown. It is clear, therefore, that for bringing about much-needed improvement in University standards of admission, teaching and examination, a national system of universal compulsory and free primary education and a sound system of secondary education, with attractive vocational courses must be adopted. This way lies the remedy for the present unsatisfactory state of things and not in proposals for leaving out in the cold students who are not gifted or have not been fitted by proper school instruction for University education.

Ladies and gentlemen, another complaint against our Universities and Colleges is that they are turning out large numbers of graduates who cannot find employment. This is obviously due to the fact that our Universities also do not provide a sufficient variety of courses to fit men for careers. As a rule those who take a degree in arts or in pure science are fit only for a teacher's work or for an administrative appointment. But schools and colleges and the public services can absorb only a small proportion of the graduates who are turned out year after year. The provision for medical relief in the country's administration is scanty, and medicine therefore can absorb only a few at present. Want of alternative courses for professional or vocational training compels many students to take to law, only to find that the bar is over-crowded and to chew the bitter cud

of disappointment. The remedy lies in providing education on an adequate scale and of the right type in commerce, in agriculture, in technology, in engineering and in applied chemistry. It is no answer to say that agriculture and commerce do not demand the services of a large number at present. The education has to be made so practical that there shall be a demand for it and the demand has to be sedulously increased. The Government and the Universities have to co-operate to give the right kind of education to the youth of the country and to find careers for them. No one branch of national activity can absorb an unlimited number of trained men. But many branches can find work for a few each, and all together can accommodate quite a large number.

It has often been cast as a reproach against our students that too many of them take to law. But it ought to be remembered that it is not their fault but their misfortune that they do so. What is the alternative open to them ?

At one time in Japan and unduly large number of young men used to take to the profession of law. The bar was soon over-crowded. Subsequently, a Faculty of Commerce was started. Commerce was encouraged. Banks were started and many of the young lawyers left the bar and took up commercial careers and thus served both themselves and their country.

It is the greatest condemnation of the present system—it is tragic—that after twenty years of school and university education, an Indian youth should not be able to earn a decent living to support himself, his wife, and children and his poor parents. The system is radically wrong and requires to be greatly altered. The whole atmosphere has to be changed. The education of the child has to begin from the time when he comes into the womb of his mother. For this young men and young women have to be educated before they become parents. Look at England again. There the mother is educated, the father is educated, the neighbours are educated. Almost every one has received the benefit of schooling. Educational institutions and activities greet one in every direction. The newspaper and the book are in everybody's hand. The desire to learn, to read, to know is stimulated in every conceivable way. It has become ingrained in the minds of the people. Education has become a necessity of life. An attempt has been made, and it has largely succeeded, to provide it for all stages from the cradle to the grave. It is in such an atmosphere that an English child is born and brought up. He is carefully looked after in the nursery school, the primary school, the secondary school and the technical school. When he leaves the school finally, he is fit for and is helped to get a suitable job. If he enters the University, he enters it well prepared to pursue higher studies at the University, buoyant with hope and ambition. Place the Indian student under

similar conditions, give him a fair chance, and he will not be beaten by the youth of any country on earth.

There is no end to the difficulties which beset the path of an Indian student at present. But if I may say so, the greatest of them all is that the medium of instruction is not his mother tongue but a most difficult foreign language. In no other part of the civilized world is a foreign tongue adopted as the medium of public instruction. In our Anglo-vernacular schools and high schools the medium of instruction is generally English. Though in some provinces the use of the vernacular is permitted as the medium of instruction and examination in non-linguistic subjects, the use of English is yet quite general. A child begins to learn English when he is barely seven years old, and from that time the study of his mother tongue is neglected. It occupies a second place. It begins to be regarded as of inferior value and is not much cared for. The result is that from that time until a student leaves the school too much of his precious time is spent in acquiring familiarity with a difficult language as a mere medium of instruction, a language the spelling of which might make a foreigner go mad, as Gladstone once observed. It is difficult to calculate the amount of the loss of time and effort and money which is thus inflicted upon the people of India. The same course is pursued in the college. And yet any educationist will tell you that a very small percentage of our youngmen are able to express themselves correctly in English. If I may speak of my personal experience, I may tell you that

I began to learn English when I was only seven years old. I have been learning it and using it for 61 years now. I have used it a good deal. But I frankly confess that I am not able to use it with half as much confidence as I am able to use my own mother tongue. I have had the privilege of the personal acquaintance of most of the great Indian scholars and public men of the last half a century. A good many of them won the admiration of Englishmen for speaking and writing English as they did. But I mean no disrespect to them when I say that very few of them would have claimed that they could use English with the same correctness and ease with which an average educated Englishman used his mother tongue. What then does this extensive use of English in our schools and public offices and bodies mean? It means a tremendous waste of the time and energy of our people. What is worse still is that with all the expenditure it involves, the knowledge which an average Indian youth acquires of English is poor and insufficient for his purposes. It is so poor that it often prevents him from acquiring a thorough knowledge of the subjects he studies through its medium, and from expressing in it what of such knowledge he has acquired. His knowledge of the subject cannot be as good as the knowledge which an English lad who receives education through his mother tongue acquires of the same subject. The Indian youth is hampered both in thinking and in expressing himself. He is placed at a disadvantage. National education cannot, therefore, be raised to the right

level of excellence until the vernacular of the people is restored to its proper place as the medium of education and of public business.

I do not under-estimate the value of the English language. I frankly acknowledge that its knowledge has been of great use to us. It has helped the unification of public admini . on n all parts of India. It has also helped to strengthen national sentiment. I concede that it is or is on the road to become a world-language. I would advise every educated Indian who wishes to proceed to a University, or to go abroad for higher education, to acquire a knowledge of this language and also of German or French. But we should encourage the study of English only as a second language, as a language of commerce with men, of practical business usefulness. We should not allow it to continue to occupy the supreme position which it occupies to-day in the system of our education and our public administration and in the business world. It is impossible to calculate the full extent of the loss which the disregard of our vernaculars has inflicted upon our people. We should take early steps to check it. If there be any who think that our own vernacular should not be used as the medium of higher education and public business because it is not as highly developed to-day as English is, let me remind them that this very English language, which now possesses a literature of which every Englishman is justly proud, was neglected and contemned in England itself, until a

few centuries ago. Up to the middle of the fourteenth century French was taught in England to the exclusion of English. It was only towards the end of the 14th century that the people of England began to use the English tongue in their schools, courts and public offices. Says Green in his 'Short History of the English People'.

"In the middle of the fourteenth century the great movement towards freedom and unity which had begun under the last of the Norman Kings seemed to have reached its end, and the perfect fusion of conquered and conquerors into an English people was marked by the disuse, even amongst the nobler classes, of the French tongue. In spite of the efforts of the grammar schools, and of the strength of fashion, English was winning its way throughout the reign of Edward III to its final trumph in that of his grandson. 'Children in School', says a writer of the earlier reign, 'against the usage and manner of all other nations, be compelled for to leave their own language, and for to construe their lessons and their things in French, and so they have since Normans first came into England. Also gentleman's children be taught to speak French from the time that they be rocked in their cradle, and know how to speak and play with a child's toy : and uplandish (or country) men will liken themselves to gentlemen, and fondle (or delight) with great business for to speak French to be told of'. 'This manner,' adds a translator of Richard's time, 'was much used before the first

murrain (the plague of 1349) and is since somewhat changed ; for John Cornewaile, a master of grammar, changed the lore in grammar school, and construing from French into English ; and Richard Penchriche learned this manner of teaching of him, as others did of Penchriche. So that now, the year of our Lord, 1385, and of the second King Richard after the conquest nine, in all the grammar schools of England, children leaveth French, and construeth and learneth in English." A more formal note of the change thus indicated is found in the Statute of 1362, which orders English to be used in the pleadings of courts of law, because "the French tongue is much unknown."

Ladies and gentlemen, the result of this simple natnral change was that within about two centuries of it, Shakespeare, Milton, and a host of poets and writers built up a glorious literature, the most important monument of which is the English version of the Bible, the noblest store-house of the English tongue. Imagine what the loss of the English-speaking world would have been if English had continued to be neglected as it was till 1382. Similarly who can calculate the loss which India has suffered because Hindi and the other Indian vernaculars have not received the attention they deserved and their literatures have not been developed to the extent they could have been developed as the media of national education and communication ? English can never become the *lingua franca* of India. After nearly three quarters of a century

of education, only 0·89 per cent. of the total population of India know English. It must therefore yield the place of honour in India to the principal Indian vernacular—to Hindi—or Hindustani—the language of Hindustan. So long as English will occupy its present prominent place in India in the courts of law, in public offices and bodies, in schools and colleges and Universities, the language of Hindustan cannot acquire its rightful position in the economy of national life, and a national system of education can not be developed.

Ladies and gentlemen, I have described to you some of the disadvantages under which University Education labours in India. I have pointed out its defects and deficiencies, and the obstacles which obstruct its progress. Let me now invite attention to the remedy. What is all this enormous difference between education in England and education in India due to? Both countries are under the same sovereign. The affairs of both have been controlled by the same Parliament. A hundred and fifty years ago the Parliament of Great Britain and Ireland assumed direct responsibility for guiding the destinies of India. It has during this period repeatedly avowed that it is responsible for the moral and material progress of the people of India. It has of course also been responsible for the welfare of the people of England. It has discharged its responsibility to the people of England by introducing a most excellent system of national education. Sixty years ago it made elementary education compulsory through-

out Great Britain and Ireland. In 1891 it made that education free. During this half a century it has organized and recognized its system of education, general and technical, to meet varying national needs and requirements, and, by means thereof, it has enabled Britishers to hold their own in the keen competition with other advanced nations of the world in various directions. The prosperity and power which England enjoys to-day in the world is due in large measure to its system of education. Turn now to India. In spite of the repeated professions of solicitude for the welfare of the masses of India, Parliament has not been able to secure to them the blessing even of elementary education. The need for such education has repeatedly been pointed out and admitted. Only a few years after the Act of 1870 was passed in England, an Education Commission was appointed by the Government of India. It reported in 1883 and recommended the universal extension of elementary education. Several Commissions and Committees have since then made similar recommendations. The last to do so was the Royal Commission on Agriculture which reported only a year ago. Besides, for forty-five years we Indians have been asking that elementary education should be made universal, and that a system of technical, agricultural, industrial and commercial education should be introduced. But this has not been done. In 1910 Mr. Gokhale introduced a bill to initiate a system of permissive compulsory education, but his bill was opposed by Government and defeated. Since the reforms were introduced in

1920, the representatives of the people have tried to introduce an element of compulsion in certain areas in some provinces. But the total progress of elementary education brought about in India under the administration for which the Parliament of England has been responsible for a century and a half, is attested by the fact that only 6·91 per cent. of the total male population and only 1·46 of the female population was at school in 1927. This is truly appalling The conclusion to which we educationists in India are driven is that the difference is due to the fact that in England Parliament has been responsible to the people, but the Government in India has not been so, and that no foreign Government can serve the interests of the people over whom it has acquired sway as a Government of their own can.

The question of national education is the most vital problem in the administration of a country. It can be dealt with in all its varying phases effectively and well only by a national Government. When a national Government is established, as I hope, it will be established next year, one of the first things it will have to do is to call a Conference of eminent educationists to discuss and recommend a national educational policy to be pursued in India. Such a Conference will of course take note of the experience which has been gained by other nations in the matter of public education and will recommend a comprehensive programme of education suited to the needs of all classes of the people of the country.

When such a policy and programme have been adopted by the future Government of this country, and have been put into operation, then and then only will the Universities of India be able to produce the highest results of which the Indian intellect is capable.

That the education system which is in vogue in India is unsuitable to our national and cultural needs hardly needs saying. We have been blindly imitating a system which was framed for another people and which was discarded by them long ago. Nowhere is this more forcibly illustrated than in the education of our women. We are asking our girls to pursue the same courses which are prescribed for our young men without defining to our selves the results which we desire to follow from their education.

The education of our women is a matter of even greater importance than the education of our men. They are the mothers of the future generations of India. They will be the first and most influential educators of the future statesmen, scholars, philosophers, captains of commerce and industry and other leaders of men. Their education will profoundly affect the education of the future citizen of India. The Mahabharata says : "There is no teacher like the mother" We must, therefore, define the goal of their education and take counsel together and obtain the best advice as to what courses will most suit them, how we shall secure to them a good knowledge of our ancient literature and culture and combine with it a knowledge of modern literature and

science, particularly biological science, of art and painting, and of music, how we shall secure the physical, intellectual, moral and spiritual upbuilding of the womanhood of the country. Do we want to rear up women of the type of Savitri and Arundhati, Maitreyi and Gargi, Lilavati and Sulahba of old, or of the type of administrators like Ahalyabai, or of the type of the brave fighter Lakshmi Bai of Jhansi, or women who will combine the best characteristics of the women of the past and of the present, but who will be qualified by their education and training to play their full part in building up the new India of the future? These and similar questions will demand consideration before a national programme for the education of our women will be settled. Statesmen and scholars shall have to sit together to discuss and recommend such a programme.

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Ladies and gentlemen, I have detained you long. But I hope you will bear with me just a little longer while I say a few words to the graduates who have obtained their diplomas to-day and who are going out to enter life. I will be as brief as possible.

I ask you young men and young women to remember the promises you have made to me and through me to your *alma mater* before you obtained your Diplomas. Remember those promises. Remember also the advice which our esteemed Pro-Vice-Chancellor has given to you in the words of the revered Rishis of old. Speak the truth, live truth, think truth. Continue your studies throughout your life. Be just and fear none. Fear only

to do that which is ill or ignoble. Stand up for right. Love to serve your fellow-men. Love the motherland. Promote public weal. Do good wherever you get a chance for it. Love to give whatever you can spare.

Remember the great fundamental truth which you have repeatedly been taught in this University. Remember that the whole creation is one existence, regulated and upheld by one eternal, all-pervading intelligent power, or energy, one supreme life without which no life can exist. Remember that this universe is the manifestation of such a power, of the one without a second, as say the Upanishadas, the creator and sustainer of all that is visible and of a vast deal which is invisible to the human eye. Remember that such a power—call him Brahma,—call him God, is both imminent and transcendant, and has existed thoughout all stages of evolution. He constitutes the life in all living creation. Should a doubt arise in your mind about the existence of this power, turn your gaze to the heavens, wonderfully lit with stars and planet, that have been moving for unimaginable ages in majestic order. Think of the light that travels with marvellous rapidity from the far distant Sun to foster and sustain life on earth. Turn your eyes and mind to the most excellent machine—your own body—which you have been blessed with, and ponder over its wonderful mechanism and vitality. Look around you and see the beautiful beasts and birds, the lovely trees,

with their charming flowers and delicious fruits. Remember that One Supreme Life which we call Brahma or God dwells in all, this living creation in the same way as it does in you and me. This is the essence of all religious instruction :

स्मर्तव्य: सततं विष्णुर्विस्मर्तव्यो न जातु चित् ।
सेर्वं विधि निषेधा: स्युरेतयोरेव किंकरा: ॥

"Ever to remember God, never to forget Him" All religious injunctions and prohibitions subserve these two alone." If you will remember that God exists and that He exists in all living creatures, if you will remember these two fundamental facts, you will ever be able to stand in correct relation with God and with all your fellow creatures : From the belief that God exists in all sentient beings has flowed the fundamental teaching which sums up the entire body of moral injunctions of all religions, namely—

आत्मन: प्रतिकूलानि परेषां न समाचरेत्

That is, one should not do unto others that which he would dislike if it were done to him. And

यद्यदात्मनि चेच्छेत तत्परस्यापि चिन्तयेत्

i.e. whatever one desires for himself, that he should desire for others also.

These two ancient injunctions lay down a complete code of conduct for all mankind.

If anybody should steal your watch or any other of your possessions you would be pained. Therefore cause

not such pain to another by stealing his watch or any article. When you are ill or thirsty you desire that some one should give you medicine or relieve your thirst. Therefore if there be any sister or brother who stands in need of similar relief from you, consider it your duty to render it. Remember these two grand negative and positive injunctions, they embody the Golden Rule of conduct which has been applauded by all the religions of the world. It is the very soul of religion and ethics. Christianity claims it to be its own special contribution. But in reality it is a much older teaching and found a place of honour in the Mahabharat thousands of years before the advent of Christ. I say this not in any narrow spirit, but only to impress upon you that this ancient teaching has come down to us as a noble heritage, and that it is one of the most precious possessions not only of the Hindus but of the whole human race. Treasure it in your hearts, and I am sure your relations will be right and loveable both with God and man.

You must at the same time also remember that this is the country of your birth. It is a noble country. All things considered there is no country like it in the world. You should be grateful and proud that it pleased God to cast your lot here. You owe it a special duty. You have been born in this mother's lap. It has fed you, clothed you, brought you up. It is the source of all your comfort, happiness, gain and honour. It has been your play-ground, it will be the

scene of all your activities in life, the centre of all your hopes and ambitions. It has been the scene of the activities of your forefathers, of the greatest and the humblest of your nation. It should be for you the dearest and the most revered place on the surface of the earth. You must, therefore, always be prepared to do the duty that your country may demand of you. Love your countrymen and promote unity among them. A large spirit of toleration and forbearance, and a larger spirit of loving service is demanded of you. We expect you to devote as much of your time and energy as you can spare to the uplift of your humble brethren. We expect you to work in their midst, to share their sorrows and their joys, to strive to make their lives happier and happier in every way you can. And here I have a definite advice to offer you. We all deplore that there is immense ignorance in our country. We should not wait for its removal till we get Swaraj. I call upon every one of you, young men and young women, to take a vow that you will start a crusade against illiteracy, a campaign to spread knowledge and enlightenment among the teeming millions of India. (Hear, hear and cheers.) Organize your strength. During the period of your leisure or vacation, make it a point to go to the villages and work among your countrymen. Be determined to dispel the darkness which envelopes our masses. Open schools. Instruct the masses in the three R's, *i. e*, reading, writing and arithmetic. To which add one more, *viz.*, 'religion,' the religion of which I have spoken,

the religion of love and service, of toleration and mutual regard. Teach these four R's to every boy and girl, every man and woman, old or young. Do not discard religion. Properly understood and taught, it will contribute in rich measure to promote harmony and happiness among all mankind. Promote education by the simplest means. Help our people by your instruction to advance sanitation, health and hygiene in their villages by their own co-operative organizations. I exhort you all, those who are going out of the University now and those who will still be here, to form

लोक शिक्षा समिति

a People's Education League, and start betimes the campaign against illiteracy and ignorance, which to our shame has too long been delayed. Invite all the educated youth of our country to join in undertaking this grand endeavour. We have only to combine and work. Success is certain to crown our efforts.

Throughout the period of your work, take care to keep alive the sense of your duty towards God and towards your country. It will sustain you in the most difficult situations and help you to avoid the many obstacles which beset your path. A remembrance of what you owe to God will help you to cherish feelings of brotherliness, of kindness and compassion, not only towards men but towards all innocent creatures of God. It will save you from causing hurt to any one except in the right of private self-defence or the defence of your country. A remembrance of your duty to your country, will help you always to

be prepared to offer any sacrifice which may be demanded of you for the protection of its interests or honour. You want freedom, you want self-government in your country. You must be prepared to make every sacrifice which may be needed for it. You have in the course of your education studied the inspiring history—past and present—of the struggles to establish or maintain freedom, which have taken place in our own country and in other lands You have read of the spirit of valour and self-sacrifice which breathes through the best part of Samskrit literature and of modern Indian literatures. You have read and re-read and admired many glowing passages in the glorious literature of England which sing in high strain of liberty and of daring and self-sacrifice in its cause. You have learnt how in the recent Great War, the youths of England and France voluntarily exposed themselves to death in the defence of their own freedom or the freedom of other countries; with what valour and courage and tenacity French and English lads continued to fight until victory crowned their efforts, and thus won imperishable glory for their motherland. I exhort you to cultivate the same love of freedom and the same spirit of self-sacrifice for the glory of your motherland. (Loud applause.) Thus only shall we again become a great nation.

The education you have received would have been lost upon you if it did not plant an ardent desire in your

minds to see your country free and self-governing. I wish you to cherish that desire, and to prepare yourselves to discharge every obligation which may be cast upon you for the early fulfilment of it. You know that the highest duty of a citizen is to offer the final sacrifice of his life when the honour of the motherland requires it. (Hear, hear.) I desire you at the same time to remember that that duty also demands that life shall be preserved for service and not lightly thrown away under wrong inspiration. I therefore wish you to act with a full sense of responsibility and to work in the right spirit and under proper guidance for the freedom of the country. I earnestly hope you will do so..............

[Convocation Address delivered on the 16th of August, 1927, at the Annual Convocation of the University of Bombay by Sir Jadunath Sarkar, M. A., C. I. E., Honorary Member, Royal Asiatic Society of Great Britain and Ireland, Vice-Chancellor, University of Calcutta.]

............................If it is true that knowledge is power, then we are bound also to admit that the creators of new knowledge, the makers of original research, must become the masters of those who are mere borrowers of knowledge. So long as our Universities were content with merely importing to India and diffusing among our people knowledge of various kinds which had originated in Europe,—we were intellectually a debtor nation ; our best writers were mere imitators or translators. Therefore, if we wish to be self-reliant in art and science, if we wish to be independent in things of the mind, we must qualify ourselves to be givers and not merely takers ; we must create and not merely import ; we must aspire to be a creditor nation and not eternal intellectual beggars.

If the ever-flowing fountain of research and invention be confined to the European countries and never brought to India, then India will always remain the slave of Europe. In every generation we shall lag behind Europe ; we shall be always using the arts and the arms which Europe discarded fifty years ago and holding theories which were proved obsolete there two or three generations earlier. Not only a state of war, but even a temporary obstruction of transport, or the natural desire

8.

Sir Jadunath Sarkar who is known to all of us as a great scholar, chiefly emphasises the importance of original research. He says that no teacher can understand the real significance of the information contained in text-books or be a source of inspiration to his pupils, 'who has not gone through the patient and arduous discipline of original research.' The man who is only a 'transmitter of knowledge' is an 'intellectual parasite'. In his address he gives us the real aim and true significance of education. For a moment the reader is lost in his ideas and feels ashamed to think that he has been taught by 'intellectual parasites.' The address bespeaks the author.

of foreign inventors to reserve the first fruits of their research to people who can give something in return, may stop the supply of the newest knowledge and the newest appliances of civilisation from Europe to us, and then India will remain helpless and weak.

From such a degrading, such a servile condition we can raise ourselves only if we can create an independent spring-head of knowledge and art in our midst and thus enable our countrymen to become the peers of the Europeans in research and discovery.

Research, or the original investigation of truth in any branch of art or science, is not a luxury or superfluous decoration in the educational world. It is the indispensable condition of the best type of University teaching and of the highest development of the human intellect.

I have been all my life a college teacher, and for the last thirty years I have ceaselessly tried to do my little in the investigation of Indian history. You will permit me to appeal to this two-fold experience in impressing upon you the importance of original research not only for the sake of maintaining India's self-respect in the assembly of nations, but also for ensuring the best quality of teaching to our ordinary students.

No body who has not investigated truth for himself, nobody who has not gone through the patient and arduous discipline of original research, can critically judge the information contained in the text-books and

understand its real significance ; still less can he become a source of inspiration and guidance to his pupils. The mere transmitter of other people's knowledge, the lecturer who simply repeats the text books, is an intellectual parasite ; his mind has no discriminating power, no vitality of its own. Every printed word is to him equally authoritative. On the other hand, the research scholar is an explorer of new realm of thought. He has grappled with unknown difficulties and overcome them. He has personally handled the raw materials out of which truth is deduced. Thus his mind has acquired a higher discipline and he has gained a more intimate vision of truth than is possible for ordinary men. The secrets of science and philosophy are to him living realities, not catch-words borrowed from others and mechanically repeated. He can instinctively distinguish between the true and the false and correctly estimate the comparative value of different kinds of evidence. No University can discharge its functions properly unless it has this highest type of teachers among its agents.

In support of this view, I cite the testimony of a Lord Chancellor of England who also distinguished himself as one of her most successful military organisers. Lord Haldane, in the Final Report of the Royal Commission on the London University, truely observes :

"It is in the best interests of the University that the most distinguished of its professors should take part in the teaching of the undergraduates....It is the

personal influence of the man doing original work in his subject which inspires belief in it, awakens enthusiasm, gains disciples. All honest students gain inestimably from association with teachers who show them something of the working of the thought of independent and original minds. As Helmholtz says, 'Any one who has once come into contact with one or more men of the first rank, must have had his whole mental standard altered for the rest of his life'...University teaching aims, not so much at filling the mind of the student with facts and theories as at stimulating him to mental effort. He gains an insight into the conditions under which original research is carried out. He is able to weigh evidence, to follow and criticise argument and put his own value on authorities."

I may also point out that original research of the right type has an ennobling influence on character. He who has gained a vision of the secrets of nature and of the human mind, by his own efforts, is fearless in accepting truth ; he cannot be content with popular superstitions, social conventions and political catch-words. Research workers form a brotherhood of truth-seekers all over the world, who rise above national jealousies, racial prejudices, and communal differences. The pure stream of truth discovered in her loftiest original source like the heaven-descended Ganges of Hindu mythology, washes away all impurities of the human mind.

In this quest of truth, there must be constant progress ; there is no finality, no pause even. But this

fact should not deter us from it. If eternal vigilance be the price of political liberty, it is no less truly the price of national efficiency, and that price we must be prepared to pay.

Such is the imperative need of original research in the modern world. And in the promotion of research a University can do what no private individual,. however rich or industrious, can accomplish. The University must build up a library of the best books and most learned journals in all related branches of study, and a laboratory complete in scientific apparatus. It must assemble under its roof the master-workers in as many branches of study as it can, and ensure their frequent meeting together and co-operation, each schoolar supplying from his own branch the needs of the others, for no specialist can be the master of more than a few subjects, but requires light to be thrown on his special branch of study from all points of view. Therefore, the most fruitful and valuable research work has been done by those Universities where the professors regard themselves as a brotherhood of seekers after truth, working in concert and holding frequent consultation with one another. A place where each teacher comes only in his appointed hour, addresses his particular class of students, and then goes away, is a lecture institute and not a University in any sense of the term.

It is only a central authority like a University that can prevent waste through the overlapping of efforts by two or more private persons carrying on the same line

of reserch in isolation from one another. It can supply the most expert guidance and full bibliographies so as to put the workers on the right track from the very outset, instead of leaving them to blunder on to truth. And it can put libraries and laboratories to the most economical use by a wise and far-sighted division of resources. The lack of cohesion has often nullified our private efforts in the past. The organised public pursuit of research will yield better fruit.

These are the necessary conditions of research, and though they cannot be a substitute for individual genius in the worker, they can help genius to produce the best results.

In this appeal I have drawn on my life's experience in the original investigation of history. But let me assure you that scientific research needs organisation and co-operative effort in the same degree as historical inquiry. It is even more important to us from the economic point of view. The immense natural resources of our country are running to waste for want of the scientific exploration and utilisation of them on modern lines. Scientific research, if carried on here as wisely and as strenuously as in Germany, would immensely increase the wealth of our country and amply repay the expenditure of State funds.

Research is not an impossibility in India, it need not be a sham here. There are two men still in our midst who have proved that India can give to Europe in

science and philosophy truths of the highest value to mankind. What a Jagadish Chandra Bose or Rabindra Nath Tagore has done, their fellow-countrymen can do if they get the necessary opportunity.

....

The intellectual resurrection of India is the supreme ideal of the Indian nationalist. And in realizing this ideal, our Universities must play the leading part. This is a duty which they cannot any longer ignore without failing to justify their existence in the changed world of to-day. They must no longer be glorified schools, mere workshops for turning out clerks and school masters, mechanics and overseers, translators and copyists. They must in future add to the world's stock of knowledge. They must achieve intellectual Swadeshi, instead of clothing our people's minds with garments imported from Europe. Is political Swaraj possible, can Swaraj last if given by others, in a country which eternally looks up to foreign lands for all additions to human knowledge, for all new discoveries in medicine and science, for all new inventions in the mechanical arts and the accessories of civilised life, and for every leap forward of the human mind in its quest of truth ?

Your beautiful city is rightly called the Gate of India. May it establish its claim to be remembered as the gate through which new light dawns on India, nay more, passes beyond our shores to illuminate and vivify the world outside ! Such is the true Indian patriot's vision. Let the Bombay public make it a reality.

To the new graduates of this University, I have only a short message to deliver : never forget your rich inheritance, never be unworthy of the glorious opportunity which the teaching and traditions of this University have given to you. Remember that your names are inscribed as the latest recruits in the same golden book which enshrines the names of Telang and Ranade, Bhandarkar and Rajwade, and see that your life and conduct are worthy of such a noble brotherhood. By the education you have received, the treasuries of Eastern and Western wisdom have been freely opened to you. Consider your past life as only a preparation for further self-improvement and the achievement of a higher destiny for your individual selves and your countrymen in general. The world of action seldom gives its highest prizes to the most gifted in intellect or the purest in character. But that need not make us repine, that need not make us give up the struggle. The heroic soul seeks only opportunities for exerting itself, for daring, and for making its endeavour, and does not look for the meterial fruits of that endeavour. Let the graduates of the University arm themselves against the world with this eternal lesson of the Bhagabat Gita.

[Sir Hassan Suhrawardy, Vice-Chancellor of the Calcutta University delivered the following address on the 10th of February, 1934 at the Annual Convocation of the University of Calcutta.]

.. ..A point to be noticed is that, as in India, the Universities have been producing more graduates than can possibly be absorbed by the various vocations. As a result of this, University diploma-holders are employed at a less pay than working men who have their wages regulated by organized trade unions. The middle classes remain unorganized and have *inter se* to compete on low salaries. We notice a marked tendency on the Continent to restrict the number of students with relation to estimated future requirements. Very recently the new German Government has framed rules reducing the number of University students, a fact which has attracted the attention of British Educational authorities, some of whom are advocating similar restrictions in Great Britain.

We could divide British Universities into two groups. The first are similar to Continental centres of higher education and have arrangements for the professional training of future lawyers, engineers, medical men, clergymen, etc. It is worthy of note that in Great Britain an overproduction of graduates has not taken place because higher education is far more expensive there than on the Continent.

The second group deals with non-professional education. This is due to social and economic factors arising out of the existence of well-to-do, middle and

Sir Hassan Suhrawardy's address is short but masterly. He has been connected with educational work for several years and speaks from experience. He has mostly avoided the common place points and whatever he says, is his own conviction. He does not favour the idea of admitting every applicant in the university and says that only picked students should be allowed to take up higher and cultural education. He puts his entire faith in the lines of Dr. Tagore where he says that there should be "the narrowing of the meshes in our educational net, if we really wish to capture a rich booty." Sir Suhrawardy's address is appealing and revealing and every word of his sinks into the heart of the reader.

upper classes who can afford to educate their sons for the sake merely of culture and intellectual attainments. They aim at a good general education united with sports and the experience of conducting themselves in social life which fit them for the higher executive appointments in Government or in the Diplomatic services, Politics, Commerce, Finance and Industry. This kind of education enables the students to think for themselves, to analyse complicated situations, to arrive at logical solutions, and to successfully face unexpected situations singlehanded and alone.

One cannot help admiring in these institutions the fact that, inspite of great personal liberty accorded to them by tradition, the students have to observe a high standard of discipline. A visitor to-day is as greatly impressed as Emerson was in his days by the sight of "twelve hundred young men, comprising the most spirited of the aristocracy" being "locked up every night and the porter at each Hall being required to give the name of any belated student." The combination of liberty, conducive to the fostering of a sense of responsibility and personal dignity, with an enlightened but exigent discipline is a feature of English academic life, which it should be the aim of every educationist to translate to his own country. Another remarkable characteristic is the importance laid upon physical culture. In my Convocation address of 1931 I had drawn a piteous picture of the health of our student

community. At the English Universities it is not the bespectacled, the narrow-chested and the weak-legged student who get the Honours Degrees, but one who has been able to balance mental alertness with first-class physical fitness. This is a fact the importance of which cannot but be too often reiterated, specially by one with medical experience for whom moral and intellectual capacities are unconditionally linked with a clean, capable and healthy body.

Let us now turn to our Indian University problems. Though our educational system is composed of Faculties which are constituted to give strictly professional education such as Law, Medicine, Engineering, etc., the largest number of our students are absorbed by the non-professional Faculties. The vast majority of our B.A., M.A., B.Sc. and M.Sc. students come neither from an opulent class nor do they stand a fair chance of reaching high executive posts under Government or in business and finance. From the latest available fingeres in the University offices it appears that during the year 1933 there were under the University of Calcutta 1,243 affiliated Schools which sent out about 20,768 candidates for the Matriculation Examination, out of whom 13,593 passed. Amongst these, 8,299 took their admission into the 60 Colleges affiliated to the University. Out of the 1,923 successful I. Sc. candidates, only 235 took their admission in the two Medical Colleges and 64 in the one Engineering College.

Of the 2,309 successful B. A. and B. Sc. students, only 822 have joined the three Law Colleges affiliated to the University. These are the figures for a University where the total number of students in the affiliated Colleges is 30,805, of whom 18,500 reside in Calcutta alone.

So far as students of pure Arts and Science subjects, whether of the Intermediate or the Degree stages, are concerned, I find that a majority of them continue their studies, not because they feel a call, but because neither they nor their guardians have thought of anything better to do. They follow the lure of the beaten track and drift from schools to the Intermediate and thence to the Degree classes from sheer inertia. Such a state of things cannot conduce to the highest development of the special gifts of a large number of students and this can only be set right by opening up fresh avenues for their activities and giving them a lead and a vocational guidance quite early in life.

We are all aware of the restricted chances which exist for our graduates. The number of unemployed graduates is yearly increasing and this is not solely due to the present crisis. No economic prosperity is likely to absorb all our graduates. I do not know if, in the manner of Continental Universities, we will have to limit the number of admissions of students, but certainly something should be done for picking out the most suitable students for higher and cultural

education. While, on the one hand, those of our students who are not fit for cultural education should resolutely set themselves to the task, occasionally unpleasant, of learning what has been characterised as the mechanical vocations of life, we on our side must be prepared to meet them half way by providing adequate and efficient facilities for vocational training. This I regard as the most immediate problem of the University.

I do not wish to suggest revolutionary changes which would upset the balance of our educational life, but I cannot help emphasizing the need for drastic measures to save our educational activities in this province from utter ineffectuality. Whether the cost of higher education should be raised or the numbers restricted is a matter for the authorities to decide, but I make bold to dare criticism by saying that the present diffusion of higher education, with the results that it has been giving, should be regulated and, if necessary, limited. I do not for a moment mean that the masses of our province should be deprived of education but I want to make clear the distinction that lies between the problem of literacy and that of higher education and culture. Demagogic demands for higher education for the masses in the present stage of our social development must be counteracted by a sane and well-considered educational policy answering the immediate needs of the mome. t. No less a

person than Rabindranath Tagore, who cannot be suspected of class prejudices, in his inaugural University lecture at which I had the honour to preside, advocated what, in his poetic language, he called the narrowing of the meshes in our educational net if we really wish to capture a rich booty. In my Convocation address of last year I had suggested, and I take the liberty of doing so again, that Government should not attach undue importance to examination results as essential qualifications for entering service, but institute a board where physical fitness, strength of character, personality and mental agility might be regarded as tests of proficiency. This change in attitude, it would be necassary to well advertise in order to deter parents from forcing their children to follow an ineffectual academic path. In schools, too, I would strongly urge that prizes and medals should not be given only to those who obtain high marks in studies and for meek conduct, but marks should also be awarded for scouting, sports, debating contests, and games which teach the value of team-work..................

[Mr. Sachchidananda Sinha, Barrister-At-Law, Editor of "The Hindustan Review", and Vice-Chancellor of the Patna University, delivered this address on the 30th November, 1934, at the Annual Convocation of the University of Lucknow.]

....As a matter of fact, the results of University education in India have been carefully examined, from time to time, by highly competent authorities, from different standpoints, and there has been a consensus of opinion that higher education in this country has been, on the whole, a success, and that it has brought in its train wholesome and beneficial results. To confine attention to recent times, Lord Curzon—who was by no means an unqualified admirer of our system of higher education, and who tried to 'reform' it according to his lights—speaking (in the closing years of the last century) as Chancellor of the Calcutta University—made the admission that the knowledge imparted by the Universities 'had not been shamed by her children.' Later, his Government confirmed that view in an elaborate resolution. Another and still more authoritative testimony apppeared in 1909, over the name of the then Secretary of State, Lord Morley, (in a 'Memorandum on the Results of Indian Administration during last fifty years') in which it was stated that with the improvement in education has come a much higher standard of probity and sense of duty, and there has been great improvement in character and attainments in the public services'.

10.

In Mr. Sachchidanand Sinha's address there is a feast of thought and people of all tastes can enjoy it. Mr. Sinha is a renowned writer and words leaping from his pen with freshness and spontaneity speak of his puissant personality. He is a prolific writer, and all that he writes gives a proof positive of his being greatly learned and a man of vast information. He rightly emphasises the importance of women's education in this country. He is very bitter on the question of communalism and condemns it vehemently. His address is not "merely a passing 'Scoop' of the journalist but an enduring handicraft of the artist."

These high official testimonials are conclusive on the point that the results of University education have been conducive to the growth and development of a higher standard of thought and action amongst our educated classes. It goes without saying that its effect on the much larger number of Indians, who have chosen to work in the numerous walks of life, outside the ranks of the public services—in the professions, and in trade and commerce—has been equally beneficial and wholesome. Further, it has brought about that great intellectual ferment which is known as the 'Indian Renaissance', but which our unsympathetic critics prefer to call the 'Indian Unrest', Lord Morley himself described this great upheaval as 'a living movement in the mind of the Indian people for objects which, we ourselves have taught them to think desirable'.

Later, a distinguished Lieutenant-Governor of the Punjab spoke of this 'living movement' as follows:— 'What is happening in India is not a phase but a new birth, and the proof of it lies in its universal acceptance by all classes of people in that country. This interesting movement is due to a strong desire to rise higher in the scale of nations. 'Why should we lag behind,' is the voice of India from Peshawar to Cape Comorin. And so a new life is now born in India with new thoughts, new aspirations, new standards, new ideals and conceptions of society.' The Metropolitan of India, at the time, sketched out the new movement in terms

which, I am sure, will appeal to you all. 'One feature of it,' he said, 'is apparent in educated India—there is life where there was stagnation. The spiritual nature of the Indian thinkers and writers is elevated at the prospect of an awakening East, an Indian nation,' and a free and an enlightened people. Educated India is tingling with a new life, and though the form taken may be at times crude and even repellent, it is nonetheless life, life, life.' It would be easy to multiply equally eloquent declarations. but the latest testimony to the work of our universities which I may fittingly quote, is that of Lord Lothian, the Chairman of the Indian Franchise Committee.

The Marquess of Lothian, speaking on the India Bill in the House of Lords, said :—'The Indian universities are teaching the whole mass of Western education, and instructing their students in British constitutional history. They have in them a hundred thousand students, more than twice as many students as are in all the universities of this country, and practically, every one of them is a young nationalist, one and all wanting India to assume the responsibility for its own government.' He then went on to ask : 'Who are going to be the leaders of India to-morrow?' and he thus answered the question :—'The editors of the newspapers, who are going to be drawn from these students. The people who are going to be elected to the legislatures are the people, in large measure, who

have had this kind of education. It is the University students who will also find their way into the Civil Service. The leaders of the great Indian bar will be the products of the Indian universities. Again, Indian business is being increasingly manned by people who have had a university education. The India which is going to be led by these hundred thousand students, mostly nationalist, will be, an entirely different India from that which we have read about in history.'

Surely, you could not have more generous appreciations of your work and worth than those embodied in the eloquent passages I have read out to you. It is thus clear that while, like all human institutions, our higher educational system is not perfect, yet it has already rendered good and great service to the cause of Indian progress I maintain that much of the denunciation of it—even when it is not interested—is wholly unwarranted, if not irresponsible, as evidenced by the declarations I have quoted from eminent authorities. We may thus safely adopt, and adapt to our purpose, the language of John Morley, (in his famous essay on Compromise), that if 'every age is in some sort an age of transition, our own is characteristically and cardinally an epoch of transition in the very foundations of belief and conduct'. That such a momentous epoch in transition, such mental upheaval and intellectual ferment, should be inevitably accompanied by occasional extravagance, or impatience, on the part of some young

people, is not at all surprising. But I assert that the great Indian Renaissance, which is changing, with an almost kaleidoscopic rapidity the perspective, outlook and standpoint of the educated Indians, is a stern reality, which has got to be reckoned with by all concerned.

I need scarcely tell you that my object, in drawing your attention to these authoritative testimonies to the almost phenomenal success of higher education in this country, is that as educated persons you should always bear in mind your great responsibillties in all that you say and do. You cannot, therefore, be too careful not to play into the hands of your captious critics, and I hope that in all your activities you will steadily keep your great responsibilities in mind, so as not to give them a chance to hold up your class, and the system of higher education itself, to opprobrium. Probably sooner or later you will be the leaders, in various spheres of activities, of the great movement which I have briefly outlined ; and upon your ideals, aspirations, actions and methods of work will depend what turn that movement will take, for better or for worse. Now it is a trite saying that citizens must have a 'high ideal', though it is difficult in actual practice to give an exact definition of that term. One thing, however, is certain. It will not be right for young men and women to be taught that they should be only 'practical', and should confine their talents and energies to the immediate work before them, to things under their

very nose, so to say, ignoring larger issues or possibilities, and heedless of any soul-stirring prospects of the full growth of Indian manhood and womanhood.

You may, therefore, rest assured that I am not going to hold up to you any grovelling or sordid ideal, though it may be dignified by the name of 'practical politics' or 'practical statesmanship,' for I do believe firmly in the wisdom of the old Greek saying that 'to blot out a high ideal is to take the spring from out of the year.' I commend to you, therefore, the dictum of Lord Acton—the most philosophic of British historians—that 'the pursuit of a remote and ideal object arrests the imagination by its splendour, and captivates the reason by its simplicity, and thus calls forth energy which would not be inspired by a rational, possible end confined merely to what is reasonable and practicable.' I, therefore, feel fully justified in appealing to you to place before yourselves high and noble ideals in all your work, including that of the regeneration of your great and historic country, since it is truer now than at any time past that where there is no vision the people perish.

Some of you might be familiar with a famous figure in Victorian fiction—one Mr. Thomas Gradgrind—whose character is wonderfully portrayed by Dickens in *Hard Times.* Mr. Gradgrind was (in the words of Dickens) 'a man of realities, a man of facts and calculations,' who had become a selfish and hard-hearted misanthrope by reason of his self-education on the unidealistic doctrine

of 'facts,' and as such he represented the type of humanity described by the self-centred and the unpatriotic as 'eminently practical.' He diligently practised in his household the system that he had evolved and perfected. 'Facts' ruled him and his children ; and imagination, fancy, and ideals were absolutely cut out of their existence. His favourite dictum was :—'Now what I want is Fact : Teach these boys and girls nothing but Facts. Facts alone are wanted in life. Plant nothing else, and root out everything else. You can only form the minds of reasoning animals upon Facts : nothing else ever will be of service to them. This is the principle on which I bring up my children. Stick to Fact, Sir'.

Those of you who have not read *Hard Times* should do so to discover what happened, in the end, to Mr. Gradgrind and his family. Suffice is to say that when almost all his children had been ruined and his home devastated, he learnt, when too late, the lesson of his life that to be successful and happy one must not fail to leaven facts and figures, data and statistics, with love, forbearance and noble ideals He then left 'facts' in the background, and lived to found his views of life on 'faith, hope and charity' on which alone both humanity and the individual can thrive best. Thus, India needs at this juncture not weak-kneed wobblers or merly-mouthed temporisers of the Gradgrind type but 'bold, very bold, though not too bold' leaders and workers possessed of not only patriotism and strength of charac-

ter, but a will to do and a soul to dare in the assertion and maintenance of their just rights, even to the verge of being moderately fanatical and who, when occasion truly demands it will 'ride in the whirlwind and direct the storm.'

'But enthusiasm and idealism by themselves'—I am quoting now from the Congress presidential address, delivered at the Calcutta session of 1911, by perhaps the most gifted and the most intellectual of the sons of Lucknow, the late Mr. Bishan Nerayan Dar—'cannot achieve impossibilities'. And so while, on the one hand, I warn you against working on so-called practical considerations, it is, on the other hand, my duty to point out to you the obvious limitation on your cherishing too high ideals, which, if overlooked, will not only make your work fruitless, but perhaps be even productive of harm to your cause. That limitation is that your ideals should not be incapable of being even partially realized within a reasonable time. Experience shows that the transcendental idealist, which is only another name for the unpractical visionary, is often as much a hindrance to the real reformer as the mere man of the world, who masquerades under the cloak of being 'practical'.

The point I am dealing with now was emphasized by Plato in one of his famous dialogues—that called *Theaetetus*—in which we find Socrates speaking as follows :—'I will illustrate my meaning by the jest which

the clever and witty Thracian handmaid is said to have made about Thales (the father of Greek philosophy) when he fell into a well as he was looking up at the stars. She said that he was so eager to know what was going on in heaven, that he could not see what was before his feet. This is a jest which is equally applicable to all idealists. I think that you understand me. Theodorus ?' The latter—the friend Socrates was speaking to—assented by saying :—'I do, and what you say is true.' Yes, it is but too true indeed. If you forget what Plato insists upon through the mouth of Socrates, you will do so at the cost of your work for the country. Gaze at the star if you will, but keep your feet firmly planted on the ground. That is true practical wisdom.

The apparent conflict between the two seemingly divergent courses is successfully reconciled by Browning —that most human and manly of English poets—in one of his famous poems, wherein he says :—

The common problem yours, mine, everyone's
Is not to fancy what were fair in life
Provided it could be, but first finding
What may be, then find how to make it fair
Up to your means—a very different thing,
No abstract intellectual plan of life
Quite irrespective of life's plainest laws
But one, a man, who is man and nothing more
May lead within this world.

'Not to fancy, what were fair in life provided it could be', will obviously rule out of consideration what are called 'ideal common wealth.' Finding *first* what *may* be, clearly implies taking stock of the realities to find out what is practicable in the circumstances of each particular case. So 'finding what may be', means where, how and to what extent we have to adapt ourselves to our environment, while 'striving to make it fair up to our means' is just where the individuality and the character of the worker step in. Thus this great poet lays down that it is always possible to do something substantial to improve one's surrounding conditions but only if the realities before one are fully taken into account. What you thus need is a mind alert and active, to take stock of the situation and a character inspired by the noblest ideals and aspirations, aided by that uncommon virtue, justly called 'common sense'. So fortified, your efforts will lead to results conducive to public good and towards the realization of your goal. That is a splendid lesson to bear in mind for all who may really be desirous of achieving success in the service of their country. While, therefore, you may peruse with pleasure and delight such great classics of idealistic literature, as Plato's *Republic*, More's *Utopia*, Campanella's *City of the Sun*, Bacon's *New Altantis*, Harrinton's *Oceana* and Butler's *Erewhon*, as suggestive of ideal conditions and consummations devoutly to be wished for, you must not forget your Browning, who teaches a due combination of idealism with practicality or 'practical idealism'.

....

I suppose no convocation address delivered at present will be regarded as complete if it ignored the question of communalism. In fact, this burning topic has already formed the subject-matter of a convocation address at your own University. Since then the situation has grown worse, and matters have come to such a pass that not only have some of our provincial Governors had to appeal to the public, from time to time, to suppress the terrible and tremendous evil of communalism, which is eating into the very vitals of Indian life, but no less exalted a personage than the Viceroy of India in the course of his reply to the address presented to him, but some months back, by the municipality of Allahabad, referred to this subject in language of genuine sincerity and great earnestness. His Excellency said: 'I know of nothing that clogs so disastrously the machinery of administration as internal jealousy and disharmony. The shadow of communal dissension and ill-will is hanging at this moment all over India, and it is the duty of all those who have the welfare of this land at heart to show courage, wisdom and, above all, tolerance, towards all men, so that this evil miasma may be dispelled. I appeal to all to join hands in creating better feelings and greater concord among the communities of India. Never in her history was there greater need for such united effort.' It would be impossible for any one to improve upon the language used by his Excel-

lency Lord Willingdon, and I shall beg each one of you to do what you can to suppress the demon of communalism in your thoughts and actions, alike in your private relations and public activities.

But while appealing to you to do your best, and to strain every nerve, to stamp out communalism both in your private relations and also in the discharge of your public duties. I shall not be true either to myself or to you, if I do not tell you that even with the best of motives and intentions and the sincerest desire to follow his Excellency the Viceroy's sound advice, you will find your task one of tremendous and almost insuperable difficulty. You should, therefore, be prepared to meet with many disappointments before you can hope for any appreciable measure of success. The reason for it—as frankly stated by that distinguished publicist, experienced businessman, and a most moderate-minded politician, the hon. Sir Pheroze Sethna, in a speech lately delivered by him in the Council of State—is that 'the principle of communalism is freely and almost aggressively recognized in the constitution and in the administration' of this country. 'What wonder is there,' asked Sir Pheroze, 'if communal spirit and ambition are aroused to an undesirable extent, and if they at times manifest themselves in communal antagonism?'

This absolutely correct diagnosis of the present situation shows how the wedge, making for the growth and expansion of communalism, has been driven deeper

an ddeeper into Indian life, until almost all spheres of our activities are now affected by it. While, therefore, in normal circumstances, every word of Lord Willingdon's appeal would have struck a responsive note in the heart of the people, we can understand the reason if no such result ensues in the present condition of the country. The relations among the various communities will, I fear, continue to become worse, and communal concord is not likely to prevail amongst them unless they are made to realize, by means of the working of the administration on right, sound and impartial lines that all the Indian subjects of the Crown do constitute one people, and should be treated as such in all matters in which the State has to deal with them. There can be no surer method of promoting mutual toleration and goodwill, among the various sections of any people, than by creating in them a strong sense of identity of interest in all matters affecting their daily life, as subjects of a common State. If this be not done, and if the centripetal forces are not only not availed of but are rather subordinated to the centrifugal ones, then it is idle to expect any 'united effort' to dispel the maiasma of communal dissension and ill-will.

Bacon wrote in his famous essay on 'Sedition' that the best way to root it out was to remove the cause of it. Similarly, the one way to re-establish peace and harmony in India is to eradicate the causes that have generated the existing discords and dissensions. And I maintain that only by enforcing the lesson—not by

precept alone but by actual practice that in all their relations with the State the various Indian communities are one and indivisible, can it be reasonably expected that the 'shadow of communal dissension and ill-will', to which his Excellency the Viceroy referred, will be permanently removed. The condemnation of communalism and the preaching of toleration, mutual good-will and respect for each other's point of view, by all interested in the welfare of India, is very desirable ; but the lesson of history is writ large—and he that runs may read it—that it is only by the establishment of sound and healthy conditions conducive to the growth and development of nationalism that success in this direction may be hoped for.

I fear, I have taxed your patience, and shall not be justified in trespassing on it much longer. But I desire to impress upon you with all the emphasis at my command that while you should conserve, in your habits and character, all that is healthy and wholesome in our social traditions and institutions, it is nonetheless your bounden duty to educate yourselves to modify and adapt them to your present-day environment. In addition to revising the old standards of ideals and conduct in the light of the ever-changing conditions in this world you should train your mind to make it responsive to new lines of thought and action. Only thus by proper conservation and assimilation will you combine the culture of the East and the culture of the West, and falsify the half-truth that they can never meet. You

have thus before you a limitless field for your labours and activities. To keep yourselves in robust and vigorous health, to eschew the many defects which we have inherited because of our historical antecedents, to acquire and develop those good and desirable qualities which we are wanting in, to eradicate baneful customs, to bring the light of knowledge to the masses by propaganda for village uplift to better their economic condition, to reclaim the backward classes to a higher standard of life, to ameliorate the position of our women, to promote closer and more cordial relations amongst the different communities, to build up the iudustrial strength of the country, and, above all, to teach by the example of your life and conduct that the people of this great and historic country are now, what they claim to be, 'a nation',—these and many other useful public activities will afford to your talents and energy ample scope and occupation for a whole lifetime, and there will yet remain something unattempted, something left incomplete.

Though much good work has been done, in the past, by our reformers and leaders, it is obvious that very much more yet remains to be done, and we have yet much lee-way to make up. You may thus still hope to dream many bright dreams about the great future of your country, if only you are prepared to do bright deeds for her. The work before you, in the way of regenerating our dear Motherland, is yet so vast as to call forth all that is noblest and best in you, and if only

you will approach it in the right spirit, you may depend upon it that no young Alexander amongst you need ever feel disappointed at the prospect of there being no more territories left for him to conquer on the ancient banks of the Ganges and the Jumna. Remember that a new era is dawning on India. Though we are still but way-farers in the twilight, and the chariot of the Sun-God will take years to mount the horizon, yet it is already aglow with glimpses of a new destiny. It rests entirely with you what you will make of that glorious prospect. God grant that you all may contribute handsomely by your character, patriotism and selfless work, to the progress of India, so that in the fulness of time she may take her proper place amongst the greatest nations of the world.

Still glides the stream, and shall for ever glide ;
The form remains, the function never dies ;
While we, the brave, the mighty and the wise ;
We men, who in our morn of youth defied
The elements, must vanish—be it so !
Enough, if something from our hands have power
To live, and act, and serve the future hour ;
And if, as towards the silent tomb we go,
Through love, through hope, and faith's transcendent dower,
We feel that we are greater than we know.

May it be your great privilege to carry on your life-work for the service of your country inspired by these majestic and soul-stirring lines of Wordsworth !

[It was on the 26th of November 1932, when this address was delivered at the Eleventh Annual Convocation of the University of Lucknow by Mr. C. Y. Chintamani, M. L. C., Chief Editor, The Leader, Allahabad. His Excellency Sir Malcolm Hailey, G.C.S.I., G.C.I.E., Chancellor of the University Presiding.]

....................My own view is that ill-judged and short-sighted economies in Education are the most wasteful form of extravagance, and the public vigilance should be exercised, less in a search for minor mistakes and small savings, than in insistence upon adequate provision to enable universities and all other educational institutions to maintain and raise standards of efficiency, to provide ample and increasing opportunities for seekers of learning in various branches of knowledge, in a word, constantly to be engaged in the effectuation of schemes of reform as well as expansion.

Our universities do, as they must, look to the older and greater institutions of western countries for example and emulation ; our educationists and public men have to acquaint themselves with the opinions and aspirations of the statesmen and the leaders of thought and of action in those lands which had a long start over us, to consider and determine all that has got to be done here if we are to hold our own and march ever onward and upward. For, as was remarked by Lord Playfair many years ago, "the competition of the world has become a competition in intellect".

If this is so—and it is so—how are the children of India to hold their own in the fierce international com-

11.

Mr. C. Y. Chintamani, a veteran journalist and a renowned public man, does not touch the system of education at its surface, but dives deep into it and finds out its faults. He states that one may have great desires but if funds are inadequate nothing can be done. He is greatly in favour of equipping the universities with adequate finances. His address is full of facts and figures and one loses oneself for a while in the oceanic vastness of his information. The address bears the stamp of the solid thinking and realistic outlook of a journalist-politician. The Lucknow University is to be congratulated on requesting Mr. Chintamani to deliver the address as his eminence is not confined to journalism only, of which he is a master, but the range of his interests is astonishingly wide.

petition of the present day if at one end illiteracy continue to be the badge of the tribe and at the other, universities should remain depressed, partly due to the lack of effective aspiration on their own part to approximate to the ideal, but largely for want of funds without which achievement is impossible with the best will in the world? We see it stated sometimes that the support of high education of which, in the best of circumstances, a very limited number can avail themselves is less the concern of the state than of private philanthropy—that in fact it is so in other countries—and that Government in India have actually neglected elementary education of the masses to satisfy the clamorous need of the vocal class for facilities for their own advantage. The correct answer to this double accusation may well be that while the first charge is unquestionable the second is more than questionable.

Is it true that the governments of other countries do less for university education than Government in India? I regret that I have been unable to get the more recent figures, but those which I have seen tell a different tale. In this respect England is far from being the best example by which to be guided, for on account of the backwardness of the British Government in appreciating the obligation of the state in this regard, both America and Germany, not to speak of other Continental countries, have forged ahead of England and become competitors so formidable that she has lost her pride of place and been driven to rely upon tariffs and bargains

with her dominions to retain a substantial part of her foreign trade. But in England, too, state grants to universities have been considerably augmented during this generation as the result of the combined efforts of influential individuals and powerful organizations, reinforced by the recommendations of royal commissions and the advocacy of statesmen of eminence. The position in England was that she was nowhere before America in private munificence and nowhere before Germany in state aid. While private effort during sixty years found less than £4,000,000 in England, universities and colleges in the United States received more than £40,000,000. In Germany the Government contribution to the cost of buildings of the single University of Strassburgh was about as much as was found by private effort for buildings in Manchester, Liverpool, Birmingham, Bristol, Newcastle and Sheffield. The position in Germany as it was years ago is seen in the following figures:—

I	£	
Ordinary total income of 11 Prussian universities ...	521,910	
Contribution of Foundation Funds ...	33	per cent.
Contribution of State Funds	67	,,

II		
Ordinary total income of 10 non-Prussian universities (excluding Jena)	417,133	
Contribution of Foundation Funds ...	19	,,
Contribution of State Funds	81	,,

III

Ordinary income of all the German universities (excluding Jena)	£ 939,043	
Contribution of Foundation Funds ...	26	per cent.
Contribution of State Funds	74	per cent.

Sir Norman Lockyer said in addressing the British Association that there were as many ***professors and instructors*** in the universities and colleges of the United States as there were ***day students*** in the universities and colleges in the United Kingdom. No wonder that he cried that in depending upon private endowments "we are trusting to a broken reed". "We cannot depend upon private effort to put matters right," was his deliberate opinion. If this is the position in wealthy Britain, it must be superfluous to say that it is very much worse in our very poor country.

If the contrast between England and America is so striking, what of the position in India as contrasted with that of England? The latest figures show that the number of teachers in the universities of England is 3,027 and of students 36,781, and in the whole of Britain, 4,368 and 51,649, respectively. The number of teachers there is nearly equal to the number of students in these provinces, while the population of Britain is less than here.

Incidentally, it is instructive to notice that Sir Norman Lockyer described the reduction of fees as a "crying need", and he urged that they should not be more than one-fifth of the rates then existing. Which

over-burdened Indian parent will not say Amen! to this pious wish ?

It is an utter impossibility for this or any other Indian university to raise its stature so as to become nearly what a university ought to be to deserve that exalted appellation, without a substantial increase of its material resources alike for buildings, for libraries and laboratories and museums, for salaries for teachers and scholarships for students. And every university is entitled to look both to the state and to private philanthropy for more liberal provision for its essential requirements. I am depressed when I hear appeals addressed to Government by some elected members of the Legislative Council to cut down the grants to this and the Allahahad University, so that more may be done for mass education. I recognize no conflict between the claims of the two. Both are essential. It is indispensable that education must be spread "in widest commonalty"; that, in the impressive language of the historic Imperial Rescript of Japan, there should not be a village without a school nor a home with an illiterate member. It is not less necessary that vastly greater attention should be bestowed upon secondary education, both because of its intrinsic importance and because the universities cannot do their work with hope of success unless they get sound material from schools. To emphasize the point I am seeking to make, I cannot do better than to transcribe a few weighty words from the Report of the Royal Commission on Secondary

Education which had for President no less a man than Mr. (afterwards Lord) Bryce and included Sir Henry Roscoe among its members.

All education (the Commissioner wrote) is development and discipline of faculty by the communication of knowledge, and whether the faculty be the eye and hand, or the reason and imagination, and whether the knowledge be of nature or art, of science or literature, if the knowledge be so communicated as to evoke and exercise and discipline faculty, the process is rightly termed education.

Secondary education may be described as a modification of this general idea. It is the education of the boy or girl not simply as a human being who needs to be instructed in the mere rudiments of knowledge, but it is a process of intellectual training and personal discipline conducted with special regard to the profession or trade to be followed............Secondary education, therefore, as inclusive of technical, may be described as education conducted in view of the special life that has to be lived with the express object of forming a person fit to live it.

Assume that all that has to be done will be done for the widest diffusion of elementary and a complete system of secondary education, still the nation's requirements will not be met unless at the same time facilities for the highest education are amply provided. For, as Mr. Joseph Chamberlain said,

All history shows that progress—national progress of every kind—depends upon certain individuals rather than upon the mass. Whether you take religion, or literature, or political Government, or art or commerce, the new ideas, the great steps, have been made by individuals of superior quality and genius, who have, as it were, dragged the mass of the nation up one step to a higher level.

Suppose that during the last hundred years in India every man, woman and child had received elementary

education, there was no such ugly phenomenon as an illiterate being anywhere in the whole country, but no one went beyond a school curriculum ; would the India of 1932 be what she is, pulsating with aspiration, with a thousand and one activities for the elevation of the country's stature, and looking with hope to the future ; inspired by "the brilliant achievements of the past" to compensate for "the dismal failures of the present" by striving for the realization of the "splendid possibilities of the future" ? A literate Indian population, but without a Rammohan Roy or Ranade, a Vivekanand or Vidyasagar, a Salar Jung or Madhava Rao, a Dadabhai Naoroji or Gokhale, a Gandhi or Tagore—what, could it have done for itself for the Motherland, for humanity ? I confidently invite assent to the following propositions enunciated by Sir Norman Lockyer in inaugurating the British Science Guild :—

Now I think it is generally accepted, both in this country and in others that whether the citizens of a state are educated or not is a matter of absolutely supreme importance. It is no longer merely the concern of the child or the child's parent. It is acknowledged to be the only true foundation for a state's welfare and continued progress under conditions of peace or under conditions of war.

A complete education must be based upon things and thinking as well as upon words and memory ; we want one kind of education for everybody—*the best*—and we want that education to be carried as fa as is possible in the case of each individual......No one should be stopped save by his own incapacity...............A perfect scheme of education should make the complete man, intellectually, morally and physically. It must not be limited merely to intellect.

This leads to the question what a university strictly so called should aim at being, and should in fact be. Many wise and learned men in different lands have answered the question at different times. I will cite one opinion.

University, said the great Gladstone, is a name most aptly symbolizing the purpose for which the thing itself exists. For the work of the university as such covers the whole field of knoweledge human and divine; the whole field of our nature in all its powers ; the whole field of time, in binding together successive generations as they pass in the prosecution of their common destiny ; aiding each to sow its proper seed and to reap its proper harvest from what has been sown before ; storing up into its own treasure-house the spoils of every new venture in the domain of mental enterprise, and ever binding the present to pay over to the future an acknowledgment at least of the debt which for itself it owes the past.

A university exists largely "to foster that disinterested love of knowledge which is one of the highest of all gifts", said Lord Balfour, and it should "raise the ideal of human life". No university can be acknowledged to fulfil its mission if it is one-sided. It should not limit itself to one branch of knowledge, nor train one faculty at the expense or to the neglect of another. Neither should it shut its portals against any class of people or any section of the community. Nor should it show preference or betray prejudice on the ground of religious belief, nor raise a barrier on account of poverty. For at least a generation have we been familiar with superficial critism of "literary education" which is the label by which liberal education is sometimes sought to be belittled in value, while at the other end the

comparatively recent practice and tendency of certain universities to make technical education their speciality has been similarly decried. The truth is, as was stated by Lord Balfour, that.

Industrial work unbalanced by literary work, literary and industrial work unbalanced by speculative work, are unfit to form the mental sustenance and substance of academic training.

And it is a blessing that "no jealous tariffs stand between the free communication of ideas".

My second point is that things should be so regulated that poverty may not prevent a promising and aspiring youth from receiving the benefit of university education. The Indian Universities Commission of 1902 enunciated, and based their recommendations upon, the dubious doctrine that it was not in the interest of the country that the poor man of average intelligence should proceed to the university. This was combated in his famous minute of dissent by one of the wisest and most honoured men of the last generation, Sir Gooroo Dass Banerjee—"a master of accurate language" as Sir Thomas Raleigh described him—in the counter-doctrine, which received then and would receive at any time a far wider acceptance, *viz.*,—that while every facility should be provided for young men of exceptional celibre to receive the highest education and to conduct research so as to add to the sum of human knowledge, the average man should not be denied the requisite opportunities of raising himself. Lord Curzon, the parent of the Commission and of the

legislation that followed as a result, himself recognized in his own country as Chancellor of Oxford University, the need of increased facilities for poor men to enter the university. And the Royal Commission on the Universities of Oxford and Cambridge, of which Mr. Asquith was the Chairman and Mr. G. M. Trevelyan a member, reported that if " the nation is to derive the maximum value from those universities, the ideal to be aimed at must be to secure the opportunity of an Oxford or Cambridge education for the greatest possible number of students, from all sources, who are fully qualified intellectually to benefit by it". "We consider it a matter of vital importance" the Commissioners added, "that all possible steps should be taken to provide increased facilities for poor students who are of suitable intellectual attainments". The true university has always been, in Mr. Asquith's choice words, both "catholic in its range" and "cosmopolitan in its composition". The mediæval universities, he observed, "were always in theory, and almost always in practice, cosmopolitan. There were no barriers of birth or class or fortune. The door was open to all." And at one time the University of Bologna "had no less than 20,000 students from different countries".

I shall proceed to stress the paramount claim of efficiency on the authorities of a university. No university can afford to relax or lower its standard if it has a reputation to lose. When I say this I should not be understood to advocate an impossible stiffness of

examinations which bears no relation to the standard of teaching. I mean a reasonably high standard which should not be beyond the capacity of even the average student if he is properly diligent. At the base of the educational ladder, that is in the field of elementary education, the governing consideration should be extension or diffusion. As we ascend the ladder step by step, the need of efficiency makes itself fielt in increasing measure, and in secondary education the claims both of extension and efficiency should be equally recognized. But as we reach the higher rungs of the ladder, efficiency much more than extension should be accepted as the test of success, while at the highest it should be the sole consideration. It is not my intention to indulge in adverse criticism of anybody—unhappily for myself it is not infrequently my disagreeable duty in another place, but it is none of my business here and now—and I trust I shall not be misunderstood when I say, as I fear I must, that it would be affectation if anybody were to claim that the need I have thought it necessary to stress is at all satisfied by the attainments of the average product of this or any other university in India to-day. Numbers do not constitute the strength of an institution except in one sense ; quality is the chief source of a university's strength. When a man goes out into the world with the hall-mark of a university on his forehead, the public have a right to think that he must be possessing a certain amount of knowledge and ability and a few

qualities without which one can do no satisfactory work in any line. Is this expectation, which is both just and natural, fulfilled now ? I am not speaking of exceptions which prove the rule, nor have I in mind unfortunate specimens at the other end. I speak of the average man. I shall be glad to know that the authorities of this university can answer the question in the affirmative. It may be my misfortune and not their fault, but I am constrained to say in all candour that I am unble to think that our universities hav taken all the care they can and ought to in this vital regard. It is not fair to the public that a person should be enabled to parade a university degree when he is not worth it, and a university which so cheapens its gift is not fair to itself. Mr. Birrell put it in characteristic language when he said in his Glasgow Rectorial address, that a university is not "the academical market-place" and that "universities do not exist in order to bespatter their *alumni* with letters of the alphabet. That" he added, "is the function of a Queen's birthday". I heard a cynic say in London that his parents, instead of educating him, sent him to Harrow !

I beg pardon, ladies and gentlemen, if I have hurt any susceptibilities. But I have long felt keenly on this point and in my own view, would have been guilty of a grave omission if I had not directed attention to it as pointedly as I could, at such a place and on such an occasion.

Graduates of the year, I am supposed in this address to give you advice so to conduct yourself as to be worthy of this University which is sending you out into the world with its certificate of approval. As a rule, I am not over-anxious to force advice on people, even when it is sought. Nothing is easier to part with, almost nothing is so little valued, at least when pious resolutions have to be translated into action. This is a trait of human nature by no means of recent origin as is proved by a Sanskrit verse which says that at the time of advising others every one is the equal of Vyasa, while when it comes to practice even the Munis may not be Pandits. I have known a definition of "estimates". They are forecasts, it was said, expected if not intended to be exceeded. (If there be in this room an officer of the Public Works Department, I fear he will not thank me but I suspect he will be candid to himself and admit that it is not without a grain of truth.) Similarly, I should describe "advice" as counsel which may be applauded but is seldom taken seriously to heart. One word more. Because I shall proceed to utter some words of advice as I am in duty bound to do in a Convocation address, pray do not think that I flatter myself with the belief that I do not need it myself.

At the outset, allow me the privilege of congratulating you warmly on the success you have attained. More particularly do I offer my felicitations to the ladies who have received degrees to-day and to the

more distinguished of the graduates. The success implies the possession by them of intelligence as well as diligence—qualities which they will need in abundance in the battle of life in this age of fierce competition. I hope the cases are few where over-exertion may be followed by the inevitable reaction, except for a very brief interval of necessary relaxation. I hope, too, there are many here whose careers will prove that they have acquired a real, living interest in the subjects they have studied and cannot rest without a constant endeavour to add to their own knowledge as well as to impart it to others less fortunately circumstanced. Gladstone's warning against the mere "import of knowledge" and emphasis on the necessity of its communication to others, may well be borne in mind by all who have something to give to their less fuvoured brethren.

Coming now the advice I have to give, my first and most emphatic word would be *Discipline.* There are many contrasts which every visitor to England can easily make between life there and life here, but one quality of the Englishman which forces itself on the attention of every one—an outstanding trait of the British character that simply cannot be ignored—is this quality of discipline. Keen as we are, as every one of us worthy of the Motherland must be, that we should govern ourselves as other peoples do instead of remaining under the domination of others, we should not, and we need not hesitate to admit that the British Empire in India is

not a mere accident or freak of nature but that, as Mr. Gokhale used to put it, there were antecedent conditions which made it possible. Those conditions appertain to both races. There must have been weaknesses on our side which made successful resistance impossible and reservoirs of strength in them which carried them from victory to victory. And these were not all physical. They had discipline, organization, unity, purposefulness, determination, loyalty to their own land. "One man with conviction" wrote John Stuart Mill, "is equal to ninety-nine without it." A small band of disciplined men may be more than a match for a large horde of undisciplined, disorganized, disunited men. In the earlier years of the Indian National Congress, Mr. A. O. Hume, justly remembered by us with respect and gratitude as its father, had occasion to complain against us in these terms —"What I hoped would be chains of steel have turned out to be ropes of sand"—words which we cannot recall without self-reproach. Unity goes with Discipline. A Japanese author wrote, in giving wise counsel to Indians—that was before Japan forgot higher things in the pursuit of her imperialistic designs—that it was when the people of Japan could say "We are one" that the night of Japan fled. Our greatest thinker and his pupil, our greatest statesman—can the names of Mahadeo Govind Ranade and Gopal Krishna Gokhale, it is to them I refer, ever be mentioned in any assemblage in India without evoking the reverent homage of grateful hearts ?—were never tired of impressing this lesson

upon their countrymen. Love of country is a quality more widely diffused now than in their day, and the pressure of public spirit is not felt by a mere handful of men. The success of education and agitation is attested by the wider basis of the public life of to-day If thoughtful men cannot help regretting some of the forms which patriotism has taken in more recent years —I have not here in mind terrorism which can but be abhorred and condemned in downright language—they must in fairness recognize the capacity of suffering and sacrifice so much noticeable around them. But all will be in vain if work is not done by disciplined men in a disciplined manner under competent leadership with a single-minded devotion. It was not for nothing that Mr. Ranade told his countrymen that the British were in India in the double role of rulers and teachers, and that Mr. Gokhale never addressed younger men without inculcating the lesson of discipline. The omniscience of youth is proverbial. But while knowledge is proud that it knows so much, wisdom is humble that it knows no more. And a Sanskrit saying sets out the stages of progress from the अहमेव पण्डितः gradually and finally to the अहमेव मूर्खः Consciousness of one's limitations and of the necessity of constant self-examination and of learning from others, obedience and loyalty to leaders, discrimination between judgment and conscience so that deference may be paid to the views of more experienced men instead of an ignorant conception of 'conscience' being made the excuse for thoughtless action based upon wrong judg-

ment, the preservation of our heritage of humility and reverence without prejudice to our readiness to act boldly on our own responsibility even if everyone go against us when our conception of our Duty dictates such a course—in my humble view all these qualities are connoted by and included in the simple yet comprehensive word Discipline. And it is this supreme quality which we as a nation have to cultivate with assiduity if the untold sacrifices of many men and many women in the service of the country are to yield results at once substantial and enduring.

I should add that the necessity of discipline, applicable as it is to all men and all women, old not less than young, and in every station of life, is nowhere nearly as imperative as in educational institutions, from the elementary school right up to the university, and among no class more than among students. If it is true, as I believe it is, that the future of the country is what its men under the age of twenty-five will make it, need the point be stressed further ?

While at this, let me bring to your knowledge an observation of Mr. Justice Telang's, as I feel that there is need for making it a part of ourselves. It is that the performance of duty much more than the assertion of right must be the key to one's character. In public affairs, more particularly among peoples, who are not so fortunate as to enjoy Swaraj, situations often arise in which the assertion of right itself becomes a matter of duty. But it must be the assertion of the

right of the community or the nation or of the individual as a member of the community, and it must be made out of a sense of public duty and not for the satisfaction of personal ambition. All which is perhaps conveyed by Gladstone's definition of character as "completely fashioned will," if the phrase is minutely analysed and fully understood. Not altogether unconnected with this theme is Carlyle's admonition to the students of Edinburgh University—"Work is the grand cure of all the maladies and mischiefs that ever beset mankind," Yes, but this should be supplemented by the teaching of Sri Krishna, "Action is thy duty, fruit is not thy concern." While this is so, the ordinary human being may derive encouragement from the reflection that in this world of God's providence, honest work unselfishly done, cannot fail in the long run. Honest work. Does not this imply that the saying that "the end justifies the means" is a false and ungodly doctrine and God's blessings can only rest on righteous work righteously done ? The scriptural injunction "Righteousness exalteth a nation" and the familiar saying "the prize is in the process", enforce the same lesson.

An address to educated young men just passing from the university into the world outside to make their way in life and to do good to their country and their fellow-beings, would be sadly incomplete in these stirring times without a few words devoted to Patriotism—to love and service of the land of our birth. This virtue is nobly extolled in the Sanskrit saying which means

that Mother and Motherland are greater than Heaven itself.

What is patriotism ? There are many definitions, serious and frivolous. One thing is certain, as history testifies. Patriotism can assume many forms, and do virtuous deeds as well as perpetrate foul crimes. According to Lord Rosebery's brilliant description.

There is no word so prostituted as 'patriotism'. It is part of the base coinage of controversy.........It dictates silence and speech, action and inaction, interference and abstention, with unvarying force and facility............. It urges to heroism, to self-sacrifice, to assassination and to incendiarism. It rebuilt Jerusalem and burned Moscow. It stabbed Marat and put his bones in the Pantheon. It was the watchword of the Reign of Terror, and the motto of the guillotine. It raises statues to the people whom it lodges in dungeons. It patronises almost every crime and every virtue in history. The freaks to which this unhappy word is subject, the company and costume in which it finds itself, the crime, volubility and virtue which it inspires, deserve a separate history.

We need not travel to foreign lands for illustrations of the truth of this picturesque description. Our own country furnishes as much proof of it as one need care for. All said and done, the fact remains, that patriotism, again to quote Lord Rosebery, is a "a motive, or passion if you will, which has animated the noblest efforts, and inspired supreme heroism". And his definition is, "Patriotism is the self-respect of race".

Of this there is far greater need among people who aspire to regain their lost freedom than in more fortunate lands. In free countries patriotism requires that the freedom should be maintained and the prosperity and

happiness of the citizens increased. It assumes a more questionable form when such countries cast longing eyes on other peoples' territories and embark upon wars of conquest and annexation. Their love of freedom is for themselves, they have no use for it in their neighbours. This kind of selfish and unrighteous patriotism must be as abhorrent to right-minded men as the contentment of subject peoples to remain as they are must lead to pity and sometimes contempt.

The mere longing for freedom, however, motived by love of country and sanctified by sacrifice and suffering, will, however, never yield the desired result, if unaccompanied by capacity and character to achieve it. The tragedy of so much of Indian patriotism is its apparent futility. It is true that great thoughts must spring from the heart but, as Morley said they must go round the head if they are to be useful to mankind. It was Dadabhai Naoroji's (and when I mention him I name the greatest of Indian patriots) advice to students that if they wished to serve their country they must acquire ability. I certainly am not among those—mostly men successful in the worldly sense—who would decry ideals and hold up utilitarianism as the deity to be worshipped. I cannot forget Morley's fervid defence of idealists sneered at as "idealogues". Nonetheless, it is of advantage that you should be acquainted with the following :—

It was said of Thales, who fell into the water while looking up at the stars, that if he had looked into the water he might have seen the stars,

too, but by looking at the stars he could not see the water. (That is, practical life gives room for the highest aspiration and the loftiest ideals, while idle speculation gives no room for practical virtues.)

A published work of Swami Ram Tirath's bears the title "Balanced Recklessness". I do not know if the phrase "Practical Idealism" will be dismissed by the learned as an antithesis. But it conveys my idea, as does the saying "Be bold, be very bold, be not too bold". Know, too, as I trust and believe that at least some of you, and an increasing number as year succeeds year, will be public men, that if courage has been defined as the manliest of virtues, it has also been said that the highest form of courage is not to mind what others say of you. The public man who will do the right in all circumstances cannot too often remember the lesson conveyed by the famous words, inscribed on the portals of a college at Aberdeen : "They have said. What say they ? Let them say."

I am sure many of you are filled with patriotic ardour. It does you credit. I trust that it may not have to be said of you in after-years, what Sir Harcourt Butler remarked of the speeches of students in debating societies, that "the enthusiasm for regenerating humanity does not survive the twenty-fifth year". The country has need of all the service that all of you can render, while the advantage you have had which most of your countrymen are denied, the advantage of high education, imposes upon you the obligation of not miss-

ing any opportunity of social service. Do not, however, make the mistake of thinking that you have learnt all there is to know. I remember how an effort to staff a certain newspaper published not very far from here with educated young men of these provinces in preference to those coming from elsewhere was frustrated for several years by the manifest reluctance of graduates to master the details of the work they had to do as being too low for men of their accomplishments. Things have improved since, and the future is promising. Still it is necessary to emphasize that your college education has not already made you finished products ; it has but given you the capacity to educate yourselves in the greater university of life, without the constant personal guidance of tutors.

In what does patriotism consist in young men? Not in the neglect of health, physical, mental or moral. Not in premature participation in excited and disturbing agitations before the ability to judge, based upon knowledge of subjects, can have been acquired. Not in violent or intolerant partizanship which decries everything and everyone not to one's liking. Not in uncritical acceptance of fashionable shibboleths or rousing warcries, saving oneself the pain of thinking. Patriotism in young men consists, in the first instance, in the greatest care of their health and the closest attention to their immediate duty of study. It consists in reverence for age and regard for experience, in the acquisition of knowledge, in the discipline of the mind, in the intellectual

honesty which will pursue an argument step by step consecutively and logically to its legitimate conclusion without flinching from it howsoever against one's predilections it may be, and in the intellectual courage which accepts and acts upon such conclusion so reached. That is partriotism which is ready to obey a chosen leader and serve a worthy cause with whole-souled loyalty, never yielding to the temptation of resorting to dubious methods for the illusory gain of quick results. That is patriotism which is ready for any sacrifice that may be demanded by the highest interests of the country—including, it has become necessary to specify, the sacrifice of popularity, than which nothing is a greater tempter, and nowhere more than in political life with its many allurements and still more pitfalls. Two more words. I would remind you of Mr. Gokhale's considered opinion that it is the fate of our generation to serve the Motherland by our failures more than by our successes and yet, that we are at such a stage in our nation's progress to self-government that although the responsibility for the government of our country is yet denied to us, we must so carefully form our judgments on public questions and act with such prescience as if the functions of statesmanship had already devolved upon us. Also : Gladstone's warning uttered with reference to Ireland at a tragic moment in her affairs, applies to us with a least equal force at this juncture,—the warning that "there are stages in a nation's history when private fault is public disaster".

Pray do not think that political agitation is the whole of national work and that it is unnecessary to labour in any other sphere for the nation's uplift. That would be a fractional as well as a hopelessly wrong view of the scope and the requirements of patriotism. True it is that the first duty of a subject people is to win freedom—freedom which is the law of nature. This is nothing less than *Dharma*. I at any rate would not and need not be expected to minimize the value and the necessity of political agitation. But India's future cannot be assured by political work alone. Far the most important of all a true view of religion, what it is and is not, what restraints it does and what it does not impose, must be inculcated among the people so that unselfishness and tolerance may grow and communal over-zeal disastrous in its consequences may not be mistaken for a religious obligation. "Tolerance is reverence for every possible form of truth." In the second place, social reform must get its due share of attention as essential for, almost a condition precedent to, national emanicipation. Customs and institutions which have not the sanction of religion and have proved and continue to be detrimental to the people's well-being and advancement, must be reformed. The wider diffusion of education and the reform of the educational system so as to make it both more national and rational and to get the best results from it, must claim the attention of some of the best minds of the nation. The painful and shameful stigma of 'untouchability' attaching to certain sections of the body politic—more humiliating to those

who treat any fellow-being as an untouchable than to the victims of the custom—must be wiped out, and as many as possible should enlist themselves as volunteers in this truly religious work under the inspiring leadership of Mahatma Gandhi, who has shown himself ready to lay down life itself in this cause. It was a frequent saying of Mr. Ranade's that Hindus were paying the penalty of their double sin of the ill-treatment of the untouchable and the child-widow and India could not hope for better days unless this double sin was properly expiated There is a limitless field of work to be done for the education and emancipation of India's daughters. We see on every side painful evidences of the frightful poverty and ignorance of the mass of people : how great is the work waiting to be done for the amelioration of their conditions of living !

Nor is it less essential that a living interest should be taken by the largest number of people in our ancient literature. No land has more just reason to be proud of her past—not the recent but the ancient past—than India, whose culture and civilization has survived the wreck of many other old cultures and civilizations. Mr. Rudyard Kipling wrote on the outbreak of the great war in stirring words to rouse the people to enthusiasm : 'Who lives if England dies? Who dies if England lives?" With far greater reason may the people of India say on a long and wide view of their hoary past and taking full account of all the vicissitudes of her fortune—India lives, India will live, India is imperish-

able. May not everyone of us, every son and daughter of the Motherland adopt, appropriately and with advantage, the motto of our brilliant countryman, the late Mr. V. Krishnaswami Iyer ?—"I live on the past, in the present, for the future." Why not, indeed ? Was it not of our India that Professor MaxMuller uttered the soul-uplifting words ?—

If I were to look over the whole world to find out the country most richly endowed with all the wealth, power and beauty that nature can bestow—in some parts a very paradise on earth—I should point to India. If I were asked under what sky the human mind has most fully developed some of its choicest gift, has most deeply pondered on the greatest problems of life, and has found solutions of some of them which well deserve the attention even of those who have studied Plato and Kant—I should point to India. And if I were to ask myself from what literature we, here in Europe, we who have been nurtured almost exclusively on the thoughts of Greeks and Romans, and of one Semitic race, the Jewish, may draw that corrective which is most wanted in order to make our inner life more perfect, more comprehensive, more universal, in fact more truly human, a life, not for this life only, but a transfigured and eternal life—again I should point to India.

[An Address delivered to the graduates admitted to degrees at the Convocation of the Senate of the University of Madras on the 3rd August 1933. by The Rev. P. Carty, S.J., B. Sc., D.D., Professor, St. Joseph's College, Trichinopoly.]

..............................Science nowadays means research, and reserch adds new wealth to the stores of knowlege. In this sense it is perfectly true to say that research departments are active factors in the spread of intellectual culture, which, we said, is the primary aim of a University. Here, however, a word of caution seems to be required. Every new discovery is undoubtedly a gain to culture. But there is danger lest this emphasis on the relation between research and culture should tend to blur the very important distinction between the object and the subject of that culture. If scientific discoveries form the material object on which culture thrives, we cannot forget that human minds are the subject to whom culture is imparted. We are thus in presence of two distinct views regarding the ultimate purpose which a University should adopt for its goal. Are Universities established to extend the field of science or to impart intellectual culture to their alumni? There need, of course, be no strict separation, no divorce between the two aims. By serving science a University serves the mind of the student, and while serving the mind it promotes discovery, which is both the ambition and the reward of science. The issue confronting us is really this : on which of these two aims should the emphasis primarily be laid?

Rev. P. Carty has given thought-provoking material in his address. He does not condemn university education outright but also does not ignore the importance of vocational training. He feels that the value of university education is not to be measured by its industrial and commercial results and it would be unwise to suggest that the universities should be turned into commercial and technical institutes. His address is rich in ideas and commands attention.

The equestion is not new. Cardinal Newman, who knew something about education and University life, was only echoing an already old and sound tradition when, more than eighty years ago, he said at the opening of his well-known Discourses, that a University is a place of teaching, and that its object is the dlffusion and extension of knowledge rather than its advancement. He even added somewhat caustically: "If its object were scientific and philosophical discovery, I do not see why a University should have students." Since his days, however, the progress of science has been immense, and the Universities have very properly been drawn into the movement, taking their share in that progress by the creation of research departments. You will note, however, that they have been drawn into the movement, they have not started it. It is a fact that most of the scientific discoveries in which our modern age takes such pride, were made by individuals or institutions with little or no contact with Universities. The Industrial Revolution largely resulted from a number of mechanical inventions and labour-saving devices, which were due to professional experience, not to University training. There are in every country a variety of institutions established for the direct purpose of extending the boundaries of scientific knowledge, Such, for instance, are Literary and Scientific Academies, Royal or National Scientific Societies, laboratories munificently equipped by large industrial concerns, Observatories, Museums, Public Libraries and Clinical

Institutes, which are more frequently found outside the Universities than inside them, and which, whether national or private in origin, have become, like the sciences which they represent, international in character.

It is, therefore, apparent that, though modern Universities have their share in the advancement of science, this function is by no means a University monopoly. On the other hand, a function shared with so many diverse organisations cannot obviously be regarded as the specific object of a University ; and we are thus led to conclude that its primary function is the diffusion and extension of knowledge, the teaching, as distinct from the discovery, of it. In fact, we can conceive of a University without research departments, but we could not conceive of one which did not impart culture. This, Graduates of the year, is of special interest to you, because concretely it means that the end for which the University exists is primarily your intellectual formation : and it is, therefore, worthwhile to say a word or two on what this formation is expected to be.

It may at first seem strange to speak of intellectual culture in the singular, when addressing graduates who have pursued so many different branches of knowledge. This University has just conferred on you diplomas which point out not only to differences of grade but also to differences of kind. Nevertheless, not much reflection is required to see that, notwithstanding the differences of approach, you have really striven towards

a common end—'the one in the many,' as Marshall puts it, and this end, the highest and most desirable of human values, is a cultured mind.

What then is this intellectual culture? Is it the acquisition of a certain number of mathematical formulae, of scientific principles, of historical facts, of philosophical or economic theories? It is that, but it is much more than that. These are the data, I might almost say the raw materials, upon which the mind is trained to come into its own. A healthy body is kept fit by training, whatever be the kind of exercise it is put to; so also is it with our intellect. It needs training to bring out the force, the steadiness, the comprehensiveness, the versatility of which it is capable, and it is this development of our intellectual powers in the pursuit of knowledge which a University education endeavours to achieve.

The character of this training may be gathered from the kind of knowledge which a University imparts. A while ago, I referred to those public or private institutions established for the advancement of scientific knowledge, not of universal knowledge, but of definite limited branches of knowledge. We do not expect psychic researches from Observatories, nor chemical discoveries from an Historical Society, nor mechanical inventions from a Literary Academy. Each of them is confined to its own special subject, often a tiny corner of the limitless field of science; for thus only science be made to progress. But a University works on a totally differ-

ent concept. It is true that in practice Universities limit their teaching programmes to certain branches of knowledge, but this restriction is not the result of any inherent incapacity to take up other branches as well; it is only the outcome of material convenience or of financial limitations. Nor is the selection of branches rigidly fixed: subjects previously taught may be subsequently abandoned, while newer sciences may be added to the already established courses. In a word, the whole field of knowledge is open to Universities; and therefore, if not the actual fact, at least the inherent power of teaching any branch of knowledge bears out the view that a University is a seat of universal knowledge.

University life and methods of work point in the same direction. True, the time has gone for ever when one could be reasonably expected to know something of everything. We live in an age of science, of exact sciences, and indeed far too exacting for any mind to be able to master even a single one, let alone the totality of them. Yet we cannot, on the other hand, forget that the object of the human mind is truth, the whole truth, and it is only the limitation of our nature which forces us to parcel out the truth into narrow compartments and to master it piecemeal. While this method is unavoidable, it is defective, for we cannot sufficiently emphasize the oneness of truth and the consequent numberless affinities between the various branches of knowledge. This explains why, in the intellectual world even more per-

haps than in the world of industry, there is a growing reaction against an excessive specialisation which contracts intellectual vision, stifles the sense of proportion and thereby impairs man's judgment. Seen in this light a University organization appears particularly well adopted to give our minds the largest amount of sound culture. The mere fact of living for several years in such a seat of learning is a powerful, even if at times unsuspected, factor to stimulate the minds of students. Instead of focussing their attention exclusively on one particular object of study, University students are thrown in continual contact with other minds engaged in different intellectual pursuits, and, to a mind eager for culture, this association is of the grbatest value even in the study of its own special branch. In addition to this, there are also other activities which foster intellectual fellow-feeling, and lead to a growing sense of mutual regard, appreciation of one another's point of view and esteem for every form of learning. Debating societies, literary and scientific clubs, well equipped libraries, public lectures on a variety of useful subjects, are some of the means whereby without any special effort, the minds of University students are imbued with culture in the widest and deepest sense and are made to realize the vastness of Truth, the consequent of which is the most enduring achievement of our race.

The whole aspect of University training is not unlike the bracing experience of mountain-climbing. Apart from a few ardent pioneers who, like the heroes of Mt.

Everest, are out to conquer hitherto inaccessible peaks, the bulk of sporting mountaineers are satisfied to reach, with the help of trusted guides, and to enjoy to the full the magnificence of mountain heights. What they seek is not the glory of pioneering, but the manly pleasure derived from the healthy, though strenuous, effort of the climb, and the exhilarating satisfaction of having gone through it. Is not this a true picture of University life? Its object, mental culture, stands out as an imposing intellectual range, and to its heights youthful intellectual mountaineers are drawn year after year, resolved to endure the hardships of the climb in order to secure the benefits of that higher life. The roads may differ—they may be literature, mathematics, science or philosophy—but the methods of approach are similar and the goal is the same. Some of you may not stop where the guides have led them, and they may pursue their way to unknown summits,—new pioneers and perhaps heroes of science. But the greater number among you have reached what they sought, the bracing experience of ascending in the beaten paths of knowledge and all that this experience implies, not merely the joy of success, to which in your case the University has to-day solemnly testified, but the more enduring benefit of intellectual culture and the invigorating, though strenuous, training which led to it.

This training implies that you have acquired some amount of knowledge, but especially that you have gone

through a discipline of the mind which is to stand you in good stead through life. The knowledge which you have acquired is, however, what stands out more prominently at present, (though much is often forgotten when examinations are passed), and there are people who, for this reason, will value your diplomas primarily in the measure in which they are certificates of knowledge, chiefly of what they call useful knowledge. Is your knowledge, they will ask, going to be useful—not merely in the personal, though very appreciable, sense of helping you to well remunerated appointments, but in the direct and concrete sense of serving the cause of material progress? This is a practical question in this age of industry, and it is particularly appealing in a country where industrial development is still a long way from the goal. This thought may even have led some of you to doubt whether it was worthwhile spending precious years in the pursuit of brilliant trifles. But are such apprehensions justified? We must not forget that catchwords have often an unfortunate way of obscuring the real issues. There is a hazy notion attaching to the term 'useful knowledge' which may perhaps profitably be cleared up. It reminds one of the old distinction sometimes made by early economists who drew a line between what they called productive and unproductive labour, as if hand work alone could be regarded as productive and brainwork should be classed as unproductive. Everyone knows that the very efficiency of industrial labour is largely the result of the brainwork which made it possible. In some similar fashion we

are sometimes told that a University training which does not lead to definite industrial results is useless and might as well be scrapped. The value of University education, in other words, should be measured by its industrial and commercial results. Is this admissible? To a question of this sort, Professor Tait, the mathematical light of Edinburgh, is reported to have answered: "Thank God, I have never taught anything which was of the slightest use to anybody!" such a declaration, coming from so unexpected a quarter, must sound singularly disinterested. I do not expect your University teachers to make such a lofty profession of faith, nor is it assumed that graduates should find no use in the knowledge which they have acquired. We cannot shut our eyes to the fact that human and material progress are closely bound up with the spread of knowledge in all its forms. But are we to conclude from this that our Universities had better be turned into Technological Institutes and give up the pursuit of that intellectual culture which has so far been their main purpose?

It is comforting to find that, even in the business world, enlightened opinion upholds firmly the maintenance and the advantages of this culture. Sir William Ashley, than whom none has been more active in the development of Faculties of Commerce, thus expressed his mind on the subject: "What is wanted is not merely the technical knowledge and aptitude required to carry out decisions, but even more the sound judg-

ment which is called for in reaching these decisions. And for education which is designed to train business judgment, the pupils must not be boys, but young men, and young men with a solid foundation of previous general education." Recently the head of a large industrial concern confirmed the verdict of the Professor : "It will be" he wrote, "a sad day for industry itself when cultural studies are given a second place. Technical ability is always demanded, but what appear even more necessary are breadth of mind and a sense of proportion. These factors may be acquired through other channels, but are certainly forthcoming from the period of disinterested study and reflection which the years at cur Universities provide. A knowledge of business principles may usually be obtained afterwards, if a methodical approach to study has been acquired even in a small measure at the Universities." And the author of "Successful Living in this Machine Age" clinches the whole matter when he writes : "The time has come for educational institutions to concentrate on the great social task of teaching the masses not *what* to think but *how* to think, and thus find out how to behave like human beings in this Machine Age." Far from urging the Universities to give up their traditional ideals of imparting solid intellectual culture, this author asks that all teaching should be inspired by that culture, even for the masses who will have no access to Universities.

It should be noted further that while remaining true to their high purposes, modern Universities have very

generally adapted their teaching to the needs of the times. With the development of modern thought, the field of University education has been proportionately widened. Instead of laying almost exclusive emphasis on the study of the classics, of ancient history and philosophy as in former times, the Universities have now extended their teaching to modern literature, history and philosophy and to the modern developments of the physical and social sciences. While maintaining their chief purpose, *viz.*, the culture of the mind, they find a wide range for the development of that culture in the study of the principles and problems which govern the industrial and business world. But this training remains an intellectual pursuit and is not intended to be a technical preparation for the professions.

Even in Germany where industrial and commercial activities have been so efficiently developed, the Universities have maintained their pride of place. It is well known that the industrial awakening which occurred in the seventies of the last century, preceded and gave its *raison d'etre* to the technical and professional training which subsequently developed. A highly organised network of industrial, commercial and professional schools—high, middle and lower—was spread all over the country. But this system of technical education stood by itself ; it neither supplanted the Universities nor diverted them from their high purposes. They stand as high as ever as centres of light and intellectual culture, and they continue to attract the intellectual *elite*

of the country. It is noteworthy that in spite of the unparalled hardships of the war and post-war periods, the number of University students had increased from 60,000 in 1913 to 68,000 in 1923.

To those who have been urging our University to follow the lead of other modern Universities by establishing regular business and commercial courses, I would commend what Sir W. Ashley, himself an active promoter of these studies, said before the Commercial College of Copenhagen: "I have been occupied for a good many years in the creation of a University Faculty of Commerce, and may be suspected of an inclination to praise my own wares. It is enough, however, for my purpose that large Commercial Colleges and University Departments of Commerce or Business are already in existence. This can only have been made possible because of the backing they have received from a considerable part of the business world by providing funds, sending their sons and giving employment to graduates. And this is the best evidence that the development is not something due to a few unpractical teachers, but is the outcome of a need felt by the business community itself. I propose therefore to take that for granted."

What the experienced Professor took for granted is, I am afraid, too easily lost sight of. It is forgotten that a University is not a business firm which creates the demand, takes the risks and forges ahead in the hope of making profits. A University can only help

towards industrial and commercial development in the measure in which the business community calls for it, provides funds and is prepared to employ the graduates. That a sound business and commercial training in Universities is possible and even highly desirable, I have no doubt; but the demand for it should, as economists say, be an effective demand, implying readiness to pay the price and to employ the commodity. Perhaps the absence of such an effective demand accounts for the fact that the B. Com. degree of the Madras University is still a paper degree to be found only in the University Calendar.

But when all is said, is a University training to be justified only on the score that it has an immediate economic value? Perhaps the best way of answering this question is to put another question: do parents and guardians of young people expect an immediate economic advantage from the sports and the physical training which the young people under their care are made to undergo? We know that they do not, and they are perfectly satisfied if sound health and strong limbs are thereby developed. Bodily health and fitness are blessings which we cannot overrate. Health is a precious boon in itself apart from its uses, and we prize it as much for what it is as for what it does. But if a healthy body is a good in itself, worthy of all reasonable endeavours to acquire and maintain it, why should not a healthy intellect be such a good also? No one has brought this out more cogently than Newman.

"As health ought to precede labour of the body, and as a man in health can do what an unhealthy man cannot do, and as of this health the properties are strength, energy, agility, graceful carriage and action, manual dexterity and indurance of fatigue, so in like manner general culture of mind is the best aid to professional and scientific study, and educated men can do what illiterate cannot; and the man who has learned to think and to reason and to compare and to discriminate and to analyze, who has refind his taste and formed his judgment, and sharpened his intellectual vision, will not indeed at once be a lawyer, or a statesman, or a physician, or a man of business, or an engineer, or a chemist, or a geologists, but he will be placed in that state of intellect in which he can take up any one of the sciences or callings I have referred to, or any other for which he has a taste or special talent, with an ease, a grace, a versatility, and a success, to which another is a stranger. In this sense mental culture is emphatically *useful*."

Graduates of the year, you have gone through this discipline of the mind; you have secured the high privilege of intellectual culture; and though some people may bewail the excessive number of graduates, it is clear that you are still a tiny minority among millions to whom the same advantage has not been granted. *Noblesse oblige.* Your privilege is for you an obligation; it implies responsibilities, the carrying out of which can alone give their adequate justification to your hard-earned degrees.

In the first elation resulting from their academic successes, young people may at times be led to over-value themselves. A man of genuine, comprehensive culture is never unwilling to learn from others, though he may have the advantage over them of a University training or of other privileges of rank and position which they could never dream of enjoying. Sir Alfred Lyall, who was both a scholar and a distinguished official moving in the highest spheres, once remarked —he was then Lieutenant-Governor in the North— that he never conversed with an Indian ryot but he learnt something new, and he evidently meant something worth learning. He used, while touring about his Province, to separate himself from his suite, and while walking along, unattended, sought the company of ryots, whose language he had mastered, and freely talked to them about their interests. It is the hall-mark of a cultured mind to be ever ready to be taught, as well as to communicate ideas, informally, not pedantically.

In the University of life, which ought to be a continuation and an extension of life in a University, we have all of us, whether teachers or pupils, a chance to improve our knowledge, and enlarge our vision by the experience which contact with others can provide. We have, too, a duty commensurate with our social position and our intellectual attainments, the duty first to help others less favoured, but over and above this, the duty to improve the culture we have received,

unless, after such earnest efforts to train our mind, we choose to allow it to grow fallow and thus render our years in the University unprofitable. Perhaps the tendency exists for young men, after their University course, to keep away from intellectual pursuits and to neglect the cultivation of a mind prepared for further advance. Of the young men who have entered a profession are there many who have a library and keep imporving it, who seek, in their leisure moments, to keep abreast of the thought of the day by means of something more substantial than the daily papers, who have some methodical practice of personal reflection? Even when trials, the buffetings of fortune, the hard facts of existence stir their feelings and force them to enter into themselves, are there many who seek refuge in noble thoughts, who allow their higher aspirations to lift them to a higher plane than the drab realities of commonplace routine? Mass thinking, mass feelings invade even the highly educated. This has been finely and tersely expressed by the distinguished Indian thinker, Prof. Radhakrishnan, when he wrote in "The Future of Civilisation": We have not the time nor the competence to judge about the problems that face us......As the mass is the most significant factor, its opinions prevail over those of the thinking few. A sort of Gresham's Law of mental currency by which good, well-considered opinion is being constantly driven out by that which is hasty, impulsive and bad, operates".

This law of mental currency has a deeper bearing on society than its monetary counterpart and it may have unfortunate results which call for careful watching from all thoughtful educated men. One of these recently remarked that the post-war craze in novel, biography and pathology has been to fasten on the secondary and tertiary aspects of man's lower nature, as though his diseased states, his egoisms and his perversions were more characteristic of the race than his normal faculties, his ideals and his spiritual values. It is plainly unscientific to judge man by accidentals and not by essentials ; and whatever human deterioration we may witness, surely we assess him best by the higher, the nobler, the more cultured types. By ever keeping to this high standard, the gold standard of refined intellectual thought, will cultured minds react with success against the debasement of mental currency.

That there is urgent need of such cultured manhood was forcibly and unexpectedly emphasised by no less a man than the President of the British Association for the Advancement of Science, on the occasion of the centenary celebrations recalling the marvels of a century of scientific achievement : "In the present day thinkers' attitude towards what is called mechanical progress" said Sir Charles Ewing, "we are conscious of a changed spirit. Admiration is tempered by criticism ; complacency has given way to doubt ; doubt is passing into alarm. There is a sense of perplexity

and frustration......Man was ethically unprepared for so great a bounty. In the slow evolution of morals, he is still unfit for the tremendous responsibilities it entails. The command of Nature has been put into his hands before he knows how to command himself". These are grave words and they may well afford a guidance to those who are seeking the hidden causes of the present world-wide depression.

Cares and distractions will crowd upon you and divert you from serious thought. Men, even educated men, experience at times an aversion, as they proceed in their life's progress, from facing problems in a definite intellectual way. They fight shy of logic, with the face-saving excuse that " life is bigger than logic." It is true in a sense, but life is bigger than logic only in the sense that an express train is bigger than the rails ; but what if the train goes off the rails ?

At his best man is a seeker. Inward peace will be the reward of the earnest student who does not imagine he has done with reading and thinking when he has secured the parchment which testifies to his proficiency in the examinations. He will, moreover, prove a beacon, a shining light, a guide to his fellow-men. He and those of his kind are the men who keep up, in every country, a certain intellectual standard which is invaluable, apart from its utility in business and public life. Man does not live and thrive on material food

alone. Truth is the wholesome food of the mind, and the one purpose of the University training you have received has precisely been to make your minds fit to appreciate and to apprehend the truth. It behoves those who, like you, have been thus privileged, to place their culture at the service of their fellow-men. Your responsibilities in this matter will probably be heavier than those of earlier generations, because you are coming into a world in which it becomes a fashion to question old ideas and traditions because they are old. This is a poor standard to judge by, because things old are not necessarily old-fashioned; and the danger is that respectable traditions and even fundamental truths, ethical, social and religous, may be superseded by unworthy substitutes. We cannot undo the past, but we can improve on it, and it is precisely on this apt welding together of past tradititions with present exigencies, on the thoughtful adoption or adaptation of a revered legacy in accordance with the peculiar genius of their people, that all great nations have built up their own individual civilisations. India has noble traditions, and in the delicate task of adopting or adapting them, you will need all the resources of your intellectual training, and, I may add, of your sound common sense, to stand by the truth, that golden mean between a narrow conservatism and a rash leap in the dark.

Ideas rule the word for good or for ill. Of sound sterling ideas there can never be too many; of men who bring in fresh streams of such ideas, there will

always be too few. Prepared for this great task by your University training, may you be of their number and increase their small band. You will then be the salt of the earth, the pride of your race, worthy members of the University, and, in the highest and best sense of the word, useful and deserving sons and daughters of India.

[Address delivered at the Convocation of the University of Mysore, on the 3rd November, 1927, by Sir Jagadischandra Bose, KT., C.S.I., C.I.E., M.A., D.SC., F.R.S.]

............................You are seekers after truth; I will tell you of the discipline through which you must pass for the discovery of truth. In this the heritage of the past will help you; but you are not to be a mere slave of the past but the true inheritors of its wisdom.

I was paralysed at the beginning of my life by various hypnotic suggestions that India was only interesting because of metaphysical speculations of her ancient dreamers, and that the greatness of the country was past and never to be revived again.

You may ask who taught me better, what was the stimulus that enabled me to shake off the lethargy of despair? My answer is that my own work was my teacher, that strokes of repeated adversity served as the requisite stimulus, and that the lessons of the past have been my abiding inspiration. I fully realised that there can be no true revival except through the awakening of all that had been conserved in the national life by inheritance and culture. Such an awakening will be the release of a giant force, hitherto held latent, for dynamic expression in the great Indian renaissance. The stimulus for this must come from within, the portent of which is found in the quickened national consciousness.

13.

The address of Sir J. C. Bose is thrilling. It breathes spirit into the hearts of students. He emphasises the great value of scientific studies and appeals to students to utilise the resources of the country. He advises them to shun low standards of satisfaction and take life in right earnest. He wants students to be strong and says "Nature shows no mercy to the feeble and decadent." Sir Jagdish has shed lustre on the name of India in the eyes of the world and naturally desires his spirit to be emulated by his young countrymen.

In my address this morning I will not speak of anything that is impossible of attainment or of things that have been accomplished only in other countries, but what can be done or has been done in India. I have been, and am still a student ; your struggles and difficulties have also been mine. In your hours of despondency it may perhaps help you to know that not even a glimmer of success ever came to remove the gloom except after years of persistent struggle. I held the belief that it is not for man to complain of circumstances, but bravely to accept, to confront and dominate over them. I know that what has been done before will be accomplished again and that the past was not to remain merely as a dream.

I spoke of my Work itself being my teacher. The illumination came to me only after years of unremitting pursuit after truth. It was this that enabled me, through rigid scientific methods, to establish the great generalisation of the Unity of Life and to realise fully all its implications. I will tell you what I was able to decipher in the book of life itself, of conditions which exalt the highest manifestations of life.

The tree may be likened to a State consisting of countless living units, different groups of which co-operate in the discharge of definite functions for the advantage of the community ; any disharmony in the organism means the destruction of the commonwealth. The tree persists because it is rooted deeply in its own soil which provides its proper nourishment and endows

it with strength in struggling against all dangers that threaten it. The shocks from outside had never been able to overpower it, but only called forth its nascent power of resistance. It had met change by counter-change; the decaying and the effete had been cast off as worn leaves, and changing times called forth its power of readjustment. Its racial memory had also been a source of great additional strength; every particle of the embryo within the seed may thus bear the impress of the mighty banian tree. What then is the strength that confers on the tree its great power of endurance? It is the strength derived from the place of its birth, its perception and quick readjustment to change, and its inherited memory of the past. The efflorescence of life is then the supreme gift of the place and its associations. Isolated from these what fate awaits the poor wretch nurtured in alien thought and ways? Death dogs his footsteps, and annihilation is the inevitable end.

The highest expression in the life of a nation must be its intellectual eminence and its power of enriching the world by advancing the frontiers of knowledge. When a nation has lost this power, when it merely receives and has nothing to give, then its healthy life is over and it sinks into a degenerate existence which is purely parasitic. The status of a great university cannot be secured by any artificial means, nor can any charter assure it. Its world status is only to be won by the intrinsic value of great contribution made by its

scholars. To be organic and vital, our national university must stand primarily for self-expression and winning for India her true place among the federation of nations.

Critics have denied India's capacity for advancement of knowledge and spread of learning among her people. It has been urged that there is no true democratic spirit, that there could be no real contact between her diverse peoples, and no continuity between the past and the present ; that there is an intolerant theocratic spirit which insisted on an acceptance of authority in place of dictates of reason ; that the people of India because of their speculative bent are incapable of advancing positive knowledge ; and that the exact method of science being Western is alien to national culture, These assertions are as ignorant as they are baseless.

I do not know of any other country of the world, except ancient India, where sons of kings and commoners were required to live a life of simplicity and perfect equality under a great teacher. In our great epic we read of a great tournament that was held before the court of Hastinapura more than thirty centuries ago. Karna, the reputed son of a charioteer, had challenged the supremacy of Prince Arjuna. To this challenge Arjuna had returned a scornful answer: "A prince could not cross swords with one who could claim no nobility of descent." "I am my own ancestor," replied Karna, "and my deeds are my patents of nobility." This is perhaps the earliest assetion of the

right of man to choose and determine his destiny. Turning to recent times my father insisted on my attending the Vernacular instead of the more fashionable English School. This brought me in friendly contact with sons of toilers, those who tilled the ground and made the land blossom with green verdure and ripening corn, and the sons of fisher folks who told of strange creatures that frequented mighty rivers. From them I derived my passionate love of nature. I learnt to think in my own language and receive through Indian epics the heritage of our national culture. I also came to realise the ideals of our ancient State, of a Vikramaditya and his Court, which was never regarded as complete without the "nine gems" which represented different branches of learning. The people offered homage to the State not because it was panoplied by mere physical force, but because it aspired to make more enduring conquests in the realm of mind and spirit.

In regard to the spread of learning, geographical barriers have never in the past offered any obstacle to the intellectual communion among the different peoples of India. The vision of the past rises vividly before us, and we behold a great procession of immortals who still live and inspire us. We see Sankaracharya acclaimed everywhere during his march of intellectual conquest of all countries from the south to the extreme north. We see the scholars of Bengal with a few palm leaf manuscripts as their sole treasure, crossing the

Himalayan barrier, inspired by love and service, to carry Indian lore to Tibet, to China, and to the further East. The great intellectual movements were never confined to any particular province, for the torch of learning was kept lighted for many centuries in her different universities. And it was the fame of a great teacher that drew scholars from even the most distant corners of India. The traditions of the past have not been lost, for even to-day leaders of thought from different provinces travel from one end of the country to the other, thus keeping alive the bond of unity and closest kinship. Those who have read history aright, realise the great assimilative power of Indian civilisation by which many races and peoples came to regard this great country as their home. And it is by their joint efforts that will be built the Greater India yet to be.

It is perfectly true that nothing could be so detrimental to the furtherance of truth than a narrow theocratic bias and intolerance in accepting new facts and doctrines that run counter to narrow othodoxy. One is, however, constrained to say that this narrow spirit is more in evidence in the West than in the East. Galileo's recantation under compulsion and Bruno's being burnt at the stake are facts well known. The spirit of intolerance is still alive as exemplified by the bitter controversy that has recently arisen regarding the Darwinian theory, and the penalising of the teaching of evolution in a certain State of progressive America. There is a priesthood even in science, and it is notorious

how seldom a great discovery finds appreciation during the life of its author.

In regard to the question whether theocratic bias obstructed free pursuit of inquiry in this country, the fact is well known that two schools of thought flourished here side by side, one of which relied on faith and was supported by established authority. The other based itself on pure reason and refused to accept anything which could not be substantiated by objective proof.

No false claim should, however, be made that our ancestors were omniscient and that no further advance of knowledge was possible. What they attained was through unremitting efforts in building the edifice of knowledge step by step. Even after all they had achieved they had the greatness to declare that even the Vedas are to be rejected if these do not conform to truth. It is false patriotism that would claim credit for anything less vital than the supreme gift of freedom of inquiry that had been bequeathed to us.

Nothing can be more vulgar or more untrue than the ignorant assertion that the world owes its progress of knowledge to any particular race. The whole world is interdependent and a constant stream of thought has throughout ages enriched the common heritage of mankind. It is the realisation of this mutual dependence that has kept the mighty fabric bound together and ensured the continuity and permanence of civilisation.

Nevertheless, ignorant assertions have been made that advance of Science and State-craft are entirely due

to the contribution of the West. It must be a matter of high gratification to the Mysore State that two of its distinguished officers should have, by their patient labours, succeeded in lifting the veil that shrouded the past. The pioneer work on the *Positive Sciences of the Ancient Hindus* has been the result of vast erudition of the Vice-Chancellor of this University. No less important is the remarakble contribution of Dr. R. Samasastry whose patient and ardent scholarship has brought to light Kautilya's *Arthasastra*.

Can we, however, remain satisfied only with the traditions of the past ? Critics have told us time after time that whatever the past might have been, there is now no strength left for the renewal of our national life. They point out that while success in our national efforts have been few and far between, the failures have been far too many. But failure is only transient, while success waits for us round the last corner. It is the obvious and the blatant that blinds us to the essential. Few realise the great urge hidden to the eyes of men, that is moving the great mass of the people in their ceaseless efforts to realise some common aspiration. Where lies the secret of that potency which makes certain efforts apparently doomed to failure, rise renewed from beneath smouldering ashes ? When we look deeper we shall find that as inevitable as is the sequence of cause and effect, so unrelenting must be the sequence of failure and success. We shall find that failure must be the antecedent power to lie dormant

for the long subsequent dynamic expression which is acclaimed as success.

Although science is neither of the East nor of the West but international in its universality, yet India by her habit of mind and inherited gifts handed down from generation to generation is specially fitted to make great contributions in furtherance of knowledge. The burning Indian imagination which can extort new order out of a mass of apparently contradictory facts, can also be held in check by the habit of concentration; it is this restraint which confers the power to hold the mind in pursuit of truth in infinite patience.

Two different methods are essential for the discovery of truth, the method of introspection and the method of experimental verification. Aimless experimentation seldom leads to any great result, while unrestrained imagination leads to wildest speculation subversive of all intellectual sanity. The two methods must, therefore, be equally balanced, one supplementing the other.

The real difficulty that thwarts the investigator of life as exemplified by plants arises from the fact that the interplay of life-action is taking place within the dark profundities of the interior of the tree which our eyes cannot fathom. As the first step to discover the hidden mechanism of the tree, one has to become the tree and feel the pulse-beat of its throbbing life. Next, in order to reveal the intricate mechanism of its

life, it is necessary to gain access to the smallest unit of life, the "life atom," and succeed in recording its throbbing pulsation. For this it was necessary to invent instruments of surpassing accuracy and sensitiveness. The invention of the microscope magnifying only a few thousand times initiated a new era in advance of biological science. The Magnetic Crescograph magnifying fifty million times is now revealing the wonders of a new world, the plant itself being made to reveal the secrets of its inner life. Even in this path of self-restraint and verification, the inquirer is making for a region of surpassing wonder. When visible light ends, he still follows the invisible. When the note of the audible reaches the unheard, even then he gathers the tremulous message. A new world opens out to him beyond our conceiving, the vast world of inarticulate life, which suffers and struggles even as ourselves. Is it less of a miracle that man undismayed by the imperfection of his senses should yet build himself a raft of thought to make daring adventures in uncharted seas! And in his voyage of discovery he catches an occasional glimpse of the ineffable wonder that had hitherto been hidden from his view. That vision crushes out of him all self-sufficiency, all that kept him unconscious of the great pulse that beats through the universe. It was by the combination of the introspective and the highly advanced experimental methods that it was possible to establish the Unity of Life; the barrier that divided kindred phenomena vanished, the plant and animal being

found as a multiple unity in a single ocean of being.

The new results are so revolutionary in their implications upon the older theories regarding the functioning of plant life, that there was controversy in 1920 as to the reliability of the indications of my super-magnifying instruments. An enquiry was therefore undertaken by a Committee of leading Fellows of the Royal Society including Lord Rayleigh and Sir William Bragg the famous physicists, Sir William Bayless the animal physiologist, Professor Oliver and Blackman the plant-physiologists, and Professor Donnan the chemist. They reported as the results of various tests, that the crescograph correctly recorded growth and the actual response of living tissues to stimulus. It is worth noting that these and other extraordinary sensitive instruments were all constructed by Indian mechanicians trained in my Institute. It is necessary to lay special stress on this point at this juncture when the assertion totally ignorant and unfounded is made that lack of faculty of discovery and invention renders this country incapable of making any great industrial advance.

These wonders became revealed to me only after years of struggle in overcoming difficulties which at first appeared as almost insurmountable. It was the Indian habit of concentration that led ultimately to the overcoming of all difficulties. It is no easy life that lies before an investigator. He has to steel his body and

mind to the utmost, and prepare for a life of unending struggle. Even after all this there is no assurance whatever of success to reward him for his ceaseless toil. He has to cast his life as an offering, regarding gain and loss, success and failure, as one. But the lure that draws heroic souls is not success that can be easily achieved, but defeat and tribulation in the pursuit of the unattainable.

I have often been asked : what could be the practical use of these researches on the recondite phenomena of the life of plants ? A similar question was also asked when so far back as 1894, I succeeded in transmitting energy by wireless electric waves for starting machinery at a distance and exploding a distant mine. The invention of the galena receiver in my laboratory also solved the difficulty of long distance transmission. All this was regarded at the time as a mere scientific curiosity.

Regarding the practical applications of discoveries in plant life, researches on growth have been rendered possible by the invention of the High Magnification Crescograph. The laws of growth are now being discovered, a knowledge of which is essential for any real advance in practical agriculture. Another important advance has been made by the discovery of identical reaction of various drugs on plant and on animal life. This has led to investigations on the action of extracts from various Indian plants, the medicinal properties of which had not hitherto been suspected, and by the

employment of which the heart machine can be regulated and rendered highly efficient. The newly invented Resonant Cardiograph inscribes the different phases of the heart-beat with wonderful minuteness and reveals the specific action of different plant-extracts in reviving the activity of the heart in a state of depression. From the results of these investigation, an entirely new arsenal of medicine obtained from Indian plants will be available for the relief of humanity.

An altogether different line of advance has also been made in regard to the tracing of gradual evolution of nervous system from the simplest to the most complex. In the simpler vegetable life, where lies the plant-psyche, the faint copy of our consciousness ? A nervous structure I have been able to discover in the plant, the characteristic reactions of which are likely to lead to the better understanding of the parallel phenomena in our own psychic life. A plant carefully protected under glass from the stimulating blows of the environment looks flourishing but in reality it is flabby and decadent, its highest nervous function having remained undeveloped. But when the same plant is exposed to the rough shocks of the environment, then its nervous structure becomes fully developed. In human life also, it is not cotton-wool protection but blows of adversity that evolve true manhood.

I had occasion recently to take part at the great International Conference on Education held at Locarno. They realised that the old system hitherto in vogue was quite antiquated and that new initiative must be

taken in methods of education. The imported method hitherto in vogue is quite out of date and must therefore, be modified and made a living force for the wakening of national aspiration and efficiency. A system which holds forth no other hope but perpetual tutelage cannot but be deadening. Nothing could be more humiliating than the position of Indian students in Europe, a situation which for many reasons is full of danger. Why should we not aspire to found great centres of learning? It was this idea which led to the foundation of my Institute ten years ago by which I hoped to revive the great traditions of our country, which many centuries ago, attracted scholars from all parts of the world, within the precincts of its ancient seats of learning, at Nalanda and Taxilla. That dream of mine has now been amply fulfilled. May I not hope that what has been accomplished would be carried out with even greater power by this enlightened State? You must, however, be inspired by as indomitable a faith. In justification of that faith it was necessary to indicate briefly what was accomplished by Indian initiative and by Indian scholars.

Increasing unemployment and severe economic distress is the cause of unrest here as in other parts of the world; only on account of its magnitude the problem is far more acute here. It is hunger that drives people to desperation and to the destruction of all that has been built up for ordered progress. It is tragic that our own country with its great potential wealth and

possibilities of industrial development should be in this plight. All efforts have been long paralysed by assertions, as ignorant as they are unfounded, that this country is incapable of producing great discoverers and inventors. These assertions have now been completely disproved.

In other parts of the world, it is the best intellect of the country and the leading men of business—who are called to devise means for increasing the wealth of the country. In my travels I found little or no distress in small countries such as Norway and Denmark, countries which are in no sense rich in natural wealth. Nevertheless they have their system of universal education and the most up to date university. Poverty is practically unknown. The miracle is accomplished through science by ultilising to the utmost all the available resources of the country. Could we not take to heart the lesson thus taught? There are now a very large number of young men who could be specially trained in efficiently conducted institutes, the standard of which should bear comparison with any in the world. It should be also our aim not to be so entirely dependent on foreign countries for our higher education and for our needs. For carrying out such a programme, a far-sighted State policy is urgently required. But there is a strange general apathy on this question. It is a matter of much gratification and pride to us to know that the State of Mysore has given its most serious attention to this subject.

When man beheld spread before him the earth, the sea and the air, he went forth in his great adventures. He rode the tumultuous sea and circled the globe. The challenge of the sky he accepted and by his daring spirit conquered it and established an unobstructed highway. Man is a creative being and these miracles attest to his godlike and indomitable spirit. But the weakling, who has forgotten the divinity that is in him, leads an ignoble life of passivity. He alone who has striven and won can enrich the world by giving away the fruits of his victorious experience.

A strange weakness and passivity has entered into the life of the people, and unless the evil is remedied, the end is inevitable. Nature shows no mercy to the feeble and the decadent. The vicious circle lies in this: the lazy is content with earning what is barely sufficient to maintain life itself; the evil increases at a compound rate, reducing further the capacity for work, and also the power of resistance to ills that beset life ending in the lowering of scale of human life, starvation and death. In other countries, even under stress of great national disaster, the human efficiency has remained unimpaired, due to the joint efforts of the people and the State in building up national prosperity.

There is a special need for an enlightened policy in regard to the shaping of the post-graduate career of the most distinguished students of the university. Many of my old students showed special aptitude in science; but as there was no scientific career open for

them, they were compelled against their natural inclination, to choose the profession of law. None but the intentionally blind can fail to realise the crisis to which things are tending in a country, where distress is so widespread and where the only scope for intellect is the pursuit of tortuous and uncertain course of the law courts.

In contrast to this, I had the opportunity of becoming acquainted with the solicitude with which the Government of Japan follow the career of her promising students, whom they regard as the greatest asset for the advancement of their country. I found them personally known at headquarters, and arrangements made through Japanese Consuls in Europe and America, so that in the course of two years they go through a very special training under the most distinguished specialists to make them efficient in their subjects. They do not find themselves stranded on their return, for arrangements had already been made by their Government, so that their intellect and training find the fullest scope in the service of the State.

This leads me to the ideal held by this State which found practical expression in the establishment of the national university and in many enterprises for the welfare of the people. The university and the industrial enterprises cannot be dissociated from each other but must be regarded as complementary activities for the common good of the State. There are other countries more fortunate which can shower their millions on

a particular department of learning. We have no millions to spare and have, therefore, to utilise to the utmost the available resources, But is this to deter us, is the mind of man with his indomitable spirit of no account ?

What could be the reason of the high efficiency in administration of this State ? Is it because the Ministers are in close touch with the people realising their prosperity redounding to the credit of the State ? It is worth enquiry how some of the greatest Indian administrators found full opportunity for the expansion of their genius in the premier States of India. The genius of Sir K. Seshadri foresaw the great possibilities for utilisation of undeveloped resources of Mysore ; his abounding energy found proper scope in great schemes for irrigation and in the electric trapping of power that had hitherto run to waste. Who can truly appraise the value of these achievements or measure the stimulus given to young minds trained in this University for the unique opportunity offered for the highest devolopment of their latent powers ? Industry and research will act and react on each other to the lasting benefit of both. To Sir M. Visvesvaraya, another Minister of this State, is due the credit of Bhadravati Iron Works. In this State men are not mere dreamers, but they have the strength and persistence to see their vision realised. What could be the source of their inspiration ? Is it the love of the country and loyalty to an ideal State which had nerved them to supreme efforts ?

Teaching and research are indissolubly connected with each other. The spirit of research cannot be imparted by mere lectures on antiquated theories which are often entirely baseless and which effectively block all further progress. Nothing can be so destructive of originality as blind acceptance of *ex-cathedra* statements. The true function of a great teacher is to train his disciples to discover things themselves. Such a teacher cannot be easily found and it will be the duty of the university to discover him and give him every facility for his work. Let there be no creation of a learned caste whose attention is mainly taken up in securing special privileges. It is only from a burning candle that others could be lighted. The pupils by working under such a teacher will learn the value of persistence and of the infinite care to be taken at every step; they will catch from him glimpses of inspiration by which he succeeds in wresting from Nature her most jealously guarded secrets. They will become a part of his being and will hand down a passionate love of truth through fleeting generations. That spirit can never die; we shall pass away, and even kingdoms may disappear. Truth alone will survive, for it is eternal.

What is to be my message to young students with whom I am brought in touch to-day? Could I wish for you anything less than that you should attain the highest manhood or womanhood? May you realise the great privilege of being born at a time when your country needed you most. The civilisation we have

inherited has lasted through many milleniums ; you will certainly not allow it to be destroyed through weakness or passivity. You will answer to this call that has been echoing through ages, the call which compels men and women to choose a life of unending struggle for the alleviation of human suffering. The removal of suffering and the cause of suffering is the Dharma of a Kshatriya Be each of you a true Kshatriya !

It was action and not weak passivity that was glorified in heroic India of the past and the greatest illumination came even in the field of battle. There can be no happiness for any of us, unless it has been won for all. In this I would urge on you the doctrine of strength and of undying hope. Realise that there is something with Indian culture which is possessed of extraordinary latent strength by which it has resisted the ravages of time and destructive changes that have swept over the earth. And indeed a capacity to endure must be innate in that mighty civilisation which has seen the intellectual culture of Nile Valley, of Assyria and of Babylonia, wax, wane and disappear, and which to-day gazes on the future with the same invincible faith with which it met the past.

[The following address was delivered by the rt. hon. Sir Tej Bahadur Sapru, P. C., K.C.S.I., LL.D., at the Patna University Convocation on November 30, 1935.]

........................What we have done, it seems to me, is that we have first established and multiplied universities and then blessed them or cursed them each one of us according to his temperament or his appreciation of the situation. There are many among us who think that having regard to the size of the country and the population the number of the universities existing in the country does not err on the side of excess. Indeed the dominant feeling is that it is nothing short of a sin to put any kind of barrier in the way of higher education, that it is the pious duty of every one of us to promote and foster the diffusion of higher learning on an ever-widening area. The votaries of knowledge and culture, steeped in the wisdom of the east and the west, will always tell you that knowledge must be pursued for knowledge sake and that sordid considerations relating to the material interests of life must not be allowed to contaminate the pure atmosphere pervading our seats of learning. On the other hand, there are those who think that if only universities did not exist and did not produce ambitious young men with half-baked ideas of freedom and nationalism and socialism and all the inconvenienisms of the present day, there would be no such thing as the Indian problem and India would be a land flowing with the milk and honey of contentment and gratitude for favours received.

There is hardly any person who speaks with greater sincerity in his address than Sir Tej Bahadur Sapru. He is always worried about the educated classes and does not want to see India a nation of "learned beggars." People may not share his views, but he speaks from ripe experience. To the readers it is quite obvious that he is exceedingly worried about the educated unemployed and is violently searching some immediate remedy. He is of opinion that the system of education is to be looked at from a practical point of view. Sir Tej Bahadur has a remarkable power of expression and his address is a fine specimen of it. The importance he attaches to the economic factor in education does not result from any ignorance of other needs of man or the true order of values, but a burning realization of the extent of that economic distress amongst the educated, which for the time being appears to have pushed every thing else into the background.

Now let me tell you frankly that I do not agree with either view. It is not that I do not realize the benefits of higher learning or the necessity for developing a higher cultural life for the nation, but I cannot reconcile myself to India becoming a nation of learned beggars. It is all very well for successful lawyer-politicians who, when they have nothing else to do, take out a book from their shelves to beguile their time, to talk of culture and so also learned professors at the universities, who at times betray the common weakness of humanity by comparing their emoluments with those better circumstanced than they are, may talk of culture and knowledge for knowledge sake. But I should like these gentlemen to place themselves in the position of the long-suffering but fond parent who stints himself to educate his boy to find that the young men, on whose future he had built his hopes, when face to face with the reality of the situation finds that he has to drink of nothing but the cup of disappointment and despair so far as a career in life is concerned. Government, foreign or national, can provide 'jobs' only for a limited number. The learned professions, if they are to be followed as professions, presuppose a certain amount of private means during the period of waiting. Agricultural life has no prospects to offer. There are not many vacant or waste lands to occupy. University training has filled his mind with fine cultural ideas and all the doctrines about the distribution of wealth and the control of the means of production

from the time of Plato down to that of Lenin. Cinemas and news-papers have created new tastes which cannot be satisfied in the humble and undeveloped surroundings of village life. Trade and industry there are; they call for development and developed they must be but unless he happens to belong to the charmed circle of a trading class or belongs to a certain caste there is no use for him there, specially when the expert has yet to fight for his recognition in the economy of Indian life. This being the position—and I hope I have not placed before you an overdrawn picture—it is for those who are responsible for our educational system to revise their ideas. The problem has been engaging the attention not merely of Governments in India during the last few years, it is causing anxiety and concern to nearly every Government in Europe.

During my recent visit to Europe I had an opportunity of seeing things for myself and I can tell you that in nearly every country in Europe the problem of education is now being approached from a thoroughly practical point of view and it is being increasingly recognized that neither Governments nor universities can afford to shut their eyes any longer to the necessity of co-relating education to employment. As Mr. Harold Butler said recently at Geneva :

Important though it is to help the adult to keep his home together and to maintain his place in society during periods of enforced idleness, it is even more important both for the individual and the nation to

enable the young man to lay the foundations of his career. Howsoever hard he may be hit the former can always hope to recover his position by hard work and good fortune, but the latter, if the springs of his ambition are dried up and if the chances of learning his profession are denied him in youth, may be completely incapacitated from ever making a decent living or becoming a useful citizen. The urgency and gravity of this question is now being realized in many countries.

It is obviously out of question that in this general address I can place before you an exhaustive list of the remedies which have been adopted in other countries for the solution of this problem or of those which may be adopted in our own. I have dealt with this problem at length in another capacity in a report which I hope to submit to Government in my province within the next few weeks. For the moment I am anxious that you should recognize certain plain truths howsoever much they may seem to you to fall below that exalted idealism which it is the peculiar privilege of our universities to nurse and foster. 'The first object,' says Sir Ernest Simon, 'which most parents have in mind in wishing to give their children the best possible education is to enable them to make their way in the world and earn their living. A boy at the end of his education has now-a-days to face a difficult world where competition is keen and secure employment difficult to obtain. His chance of success depends largely on the

education which he has received.' If this is true of England it is—I maintain—even more true of India in its present condition. Without in any degree understanding the value in our national life of cultural pursuits or without intending to cast the slightest slur upon our universities. I am anxious that the whole problem of education should now be viewed from a different angle. To put it briefly my submission is that the problem of education must now be viewed along with and as connected with the problem of employment. This does not, by any means, mean or imply that we must close our universities or curtail their activities. It does, however, imply that we shall so readjust our entire system of education as to afford, on the one hand, every possible opportunity to those of our boys for receiving university education in arts or sciences who are likely to benefit by it and it also implies that we shall not allow wastage of intellect and opportunity in the case of those who are not likely to benefit at all by academic education at universities or other higher seats of learning. For the latter class we must provide suitable education, vocational or industrial or some other kind which may enable them to acquire the faculty of doing things at an early stage of their life and earn a decent living. We must give a new bias to education in its early stages.

It seems to me that essence of the whole problem lies in reforming education at the bottom, *i. e.*, in reorganizing (1) our primary education so as to bring it

more into harmony with rural conditions and (2) secondary education so as to make it self-sufficient and not subservient, as it is at present, merely to university education. It must mark, in my opinion, a definite stage in the career of a boy so that if he wishes to start in any career, for which he has received the proper training he should be able to do so at the end of his secondary education. No doubt, we shall have to provide a suitable kind of secondary education for those who propose to join universities either merely for cultural purpose or to qualify themselves for certain higher branches of public services or certain learned professions. It is only thus that in my humble judgment you can secure on the one hand the true interests of culture and on the other the material interests of a large number of our boys. At the present moment I fear the progress of the really intellectual and culturally-minded boys is impeded by their being associated at the universities with others who act as a drag on their progress. It is only when you have made some suitable provision for the latter class of boys that you will enable the former to render that service to knowledge and culture which will enable India to claim a position of honourable equality among those nations of the world which are making daily contributions to the development of science, philosophy and culture. Further, this will also permit universities to raise their standards still higher. At the present moment I am afraid we talk some what loosely of higher education

in connection with our universities. It is true that they produce every year men who achieve distinction at certain competitive examinations both in India and in England, it is also true that these men have raised the level of public conduct in our service, nor do I forget that some of these men who join learned professions achieve distinction, but when I think of universities as they are at present I do uot think of the limited number of good men they produce but of the very large number of, I shall not say second class but third class men with very indifferent intellectual equipment, with scarcely developed cultural tastes and with no clear ideas about many things. At the present moment I am afraid it is only too true to say of a large number of our young men—and I say so with profuse apologies to those of my friends who are always insistent upon the claims of culture at the universities—that a university degree is sought after merely as a passport for Government jobs and not out of unadultrated love for knowledge and culture. In the interest of the universities themselves I am anxious that they should be rescued from this degrading influence. Once you have done that there will not be that mass production of graduates which brings no credit to the universities on their cultural side but which is making life more and more difficult for those unfortunate victims of a system which may do good to some but which does, in my humble opinion, no good to the vast majority. My conviction is that we cannot

allow to tinker with this problem and leave things to drift for themselves. We must have a definite policy with regard not merely to university education but also with regard to educational institutions at the bottom. I am old enough to remember the bitter and long drawn out controversy which arose out of Lord Curzon's attempt to reform university education. Thirty years later when the whole subject of education has passed into our hands and will pass in still greater abundance under the new constitution, it is possible for us to express a regret that Lord Curzon's great intellect and driving force were not directed at that time towards reforming secondary education or giving a proper start to primary education. If that had been done it seems to me that much of the acuteness of the evils of the present system might have been prevented in good time. But now that we are going to be responsible for educating our own people I think there is no reason why we should not approach the whole problem boldly and courageously with definite and clear ideas as to the future. I am anxious to prevent misunderstandings.

As I have said before I do not wish to discourage university education or curtail the beneficent activities of our universities. I would much rather concentrate for the next few years on a reorganization of our school education. As regards the universities themselves I suggest that the time has come when each university—and it must be remembered that our

resources are not so ample as those of western countries—should select for itself certain subjects of study on which it would lay special emphasis so that special value might attach to its alumni in those subjects. I am afraid as a layman I have no business to go further into this matter, but perhaps you will permit me to say that in the earlier stages of our boys' education I would much rather that their power of observation was developed, that their general knowledge of things around them and beyond them was of a higher character than that their mind should be fed merely on certain text-books and that we should continue to attach so much artificial value to examinations and the result of examinations.

One danger that I foresee under the new constitution is that education being a provincial subject our universities and our entire educational system in each province may tend from a national point of view to become far too provincial or parochial. I sincerely hope and trust that without in the slightest degree interfering with the Autonomy of the provinces it may be possible to devise some machinery for the interchange of ideas between province and province and to secure some co-ordination and prevent unhealthy competition. I am afraid I have in dealing with this problem gone a little further than I had originally intended to do. I must now take leave of it and come to the more agreeable task of addressing the young men before me.

My young friends do not go away with the impression that when I am approaching the end of my career I have hardened or stiffened against you. I can truly assure you that all my sympathies are with you. I know from personal experience what a hard struggle life is, how difficult it is for a young man to get a start in life and to build up a career for himself. Perhaps the position of the young men of my time was not so acute as yours. You are living in times of much greater stress and competition than was the case in my youth. A B. A. or an M. A degree in my time counted for a great deal more than it does at present. But I trust that the keener the struggle becomes the more determined you will be to face it courageously.

Apart from serving your own interest—and no one can blame you if you are anxious, as indeed you must be, to earn your living and achieved istinction in the race of life—you have got a responsibility to discharge towards your country. You are going to play a much bigger part and in a much more generous measure than was permitted to the youth of my generation. New ambitions have arisen in the country. With the youth of my generation freedom was a far off adorable dream. It is not so to-day. It is a burning passion with you. You will be the instruments for consolidating that measure of freedom which has so far been achieved. More than that upon many of you will fall the responsibility of achieving still greater measure of freedom so that it

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may be your proud privilege to claim in future that you have succeeded where we failed and that you have by your wisdom, by your courage, your love of the country achieved for her a place of pride and honour among the nations of the world—a position well worthy of your past and equally worthy of your ambitions. I imagine that your political creed, or the political creed of many of you, may be summed up in one word, *i. e.*, nationalism. It is a very difficult word to define but more or less we all understand what it means. Let me, however, give you one warning—and I give it not in any carping or cynical spirit—and it is that nationalism properly understood is something wider and higher than mere intellectual beliefs or political ideals, though it may and very frequently does cover both. It must be an active principle of life, it is in my opinion a mode of life, it must inspire and regulate your day to day dealings with one another.

True nationalism must rest upon the recognition of the principle of equality of us all in the midst of a society which is traditionally entrenched behind inequalities—social and religious—and upon fairplay for all. It does not deify the past but it does not also despise the wisdom of our ancestors. It should be ready to preserve that part of our heritage which will not be a drag on our progress. Similarly, I think true nationalism must not have any prejudices against modernism or against new ideas merely because

the home of their origin is in the West. Nor must it be too ready to accept ideas merely because they have originated in the West. Your nationalism must not, on the one hand, be divorced from rationalism, nor must it forget that its primary function and duty is to give us a new synthesis of life. Nationalism again must not be confused with an active or passive hatred of other races, or limited to political or economic ideas of any particular brand. By conviction I claim to be a nationalist and I declare it with the utmost possible sincerity that I do not think in terms of caste or creed. In my case it is not the result of emotion. It is the result of a conscious effort made in the light of the history of our country and of my experience of other countries. Do not fight shy therefore of owning that you are nationalists, if you have reasoned yourself into that belief. Emotion is good, it is the spring of many generous actions, but conviction is better. I do sincerely hope and trust that you, who claim to have received liberal education and to whom your university claims to have given liberal education, will realise that the desire for political freedom imposes certain obligations. You may achieve liberty to-day but you may lose it to-morrow. What then is the stable foundation on which your freedom and your liberty will stand ?

In the peculiar circumstances of India, and viewing the matter as I do as a realist, I think the true foundation of freedom in India must be tolerance. As Dean Martin says,

If liberty is to exist, the individual must be zealous for the freedom of others ; he must be willing that people differ from him. He must not strive to make his own preferences theirs..

.... Nothing destroys liberty so surely and quick as the spread of intolerance. Tolerance is a better guarantee of freedom than brotherly love ; for a man may love his brother so much that he feels himself thereby appointed his brother's keeper.............. Small men are prone to turn their loves into proprietorships, and their cherished ideals into weapons for the coercion of others. For little-minded men are opinionated. The ignorant man always believes he is right ; the educated man seldom....................The dominance of the intolerant is always and everywhere a revolt against civilization.

These are not mere platitudes. You will have plenty of occasions for the application of these principles in the present day life of India. It is a strange irony of fate that while we should be striving for freedom, while each one of us should claim to be a nationalist, our actions should on not a few occasions belie our professions. We who were born in a different atmosphere, who derived our ideas of freedom from western sources as a thing to be admired but had no idea of the obligations it imposed, might have failed in achieving that unity of thought and action which must form the foundation of any enduriug political or social superstructure, but you who are in the spring tide of

life and who will be called upon to shoulder the burden of freedom may yet adapt yourselves to the altered needs of the time and acquit yourselves in a manner worthy of your education and worthy of your country.

Lastly, our universities must be judged by their products. It is up to you to prove that in the domain of culture you are not obsessed or overborne by a narrow sectional view of life or history. Whatever may have been the state of things in other parts of India, I believe I am right in saying that until about fifty years ago the general culture—as apart from religious belief—of the average Mohamedan and the average Hindu of the educated middle classes in Northern India and Bihar was the same—or nearly the same. I am afraid one can not take a complacent view of the situation as it has developed during the last thirty years. Conciously or unconsiously we have been developing not a common culture but different cultures on divergent lines and we can see for ourselves its effect upon our mutual relations. Is this, I ask, true nationalism? If it is anything like nationalism then I must raise my feeble voice against it and ask you at this period of your life when I hope you are yet free from the virus of this miscalled nationalism to protect yourself against the paralysing and even fatal acts of this slow but sure poison. Therein lies the danger to Indian unity and Indian self-government and freedom. May it be given to you to serve the interests of your country wisely and well.

[Address by His Excellency Sir Herbert Emerson, at the Convocation of the Punjab University on the 21st December, 1935.]

.......................In India, far more than in western countries, and in the Punjab to a greater extent than in some other provinces, the University is a powerful agency for good or evil. It affects the welfare and prosperity of the people in a hundred different ways. It spreads its tentacles over every corner of the province. It is the main reservoir from which are fed the services, the learned professions, the fields of research and, to an increasing extent, the spheres of industry and business. And, perhaps most important of all, it largely determines the character of each succeeding generation. It is, indeed, a weakness of both our educational and economic systems, that we should be dependent in such measure on University life and activities. It is not so in the West. There, the majority of boys neither expect nor receive a University education. On leaving school, they find their niches in the world, and thousands reach positions of eminence in after-life, whose scholastic attainments have ended with, if they have reached, the Matriculation examination or its equivalent. There are many roads along which the western youth can travel, if not to fame and to fortune, at least to an honourable and successful career. Here, the outlook is so circumscribed that many hundreds of boys each year proceed to a University course, not because they have any particular thirst for knowledge, or even the cultural or intellectual equipment necessary to derive advantage therefrom,

His Excellency Sir Herbert Emerson the Governor of the Punjab, in his address gives us his experience of the west. He does not believe that all people should take to university careers, but holds that those unsuited for them must engage themselves in suitable occupations as the people in the west do. "Many hundreds of boys," says he, "each year proceed to a university course not because they have any particular thirst for knowledge, or even the cultural or intellectual equipment necessary to derive advantage therefrom, but because there is nothing else for them to do." He does not indulge in idealism but talks of practical things. He is very strongly in favour of vocational training. Speaking about the evils of communalism, he says that the educated alone can eradicate them. His address is not that of a visionary or of a dreamer but of one who has a practical outlook.

but because there is nothing else for them to do. They drift on in the vague hope that, if the examiners are kind, a pass degree may help them to get some minor and ill-paid post in Government service. In this way, much excellent material is wasted ; for there is no doubt whatever, that the Punjabi lacks neither the will nor the ability to make good when the opportunity offers. One thinks of that splendid body of men, the Indian military officers, both serving and retired, few of whom had much schooling before they joined the Army, and who owe their honourable positions to personal qualities inherited through many generations of fighting men. Again, one remembers the many Punjabis who make fortunes for themselves in other lands, starting with little but courage and the determination to persevere. Then, there are big landlords and country squires, small, perhaps, as other provinces may regard them, but exercising an influence in the countryside and in the legislature, which birth alone could not give, were it not accompanied by sturdy independence and commonsense. It is, indeed, a salutary check on the natural pride of the newly-fledged graduate for him to remember that he will meet in many walks of life men who are not even Matriculation passed, but who, in their way, are as good as the best products of the University. The stuff is there all-right ; but a good deal of it is being subjected to unsuitable processes and is passed through a machine which produces, it is true, quite a fair article, but not the best of which the raw material is capable. This is the great

tragedy of our educational system. It passes too many through the same mill, and lacks any effective method of separation and selection. This would not be so, if we paid the same attention to our resources of man-power as we do to our natural resources. Take, for instance, our great system of irrigation. Before a project is sanctioned, a most careful survey is made of its economic possiblities ; the maximum area which can be profitably commanded, is included in its scope ; the agricultural conditions are carefully studied ; a classification is made of good and bad soil ; and water is not wasted on unculturable land. Use is made of other means of irrigation, if any exist, and, if large areas of barren waste are to be colonised, particular attention is paid to the future needs of the colony, both as regards men and the necessities of life. It is only when this initial survey has been made, and an estimate framed of the financial results, that any decision can be reached regarding the practicability of the scheme and, if practical, the system of distribution that should be followed. If the project is carried out, finality of distribution will not be reached for many years, if ever. The canal, its main branches and their distributaries may undergo little change from their original design ; but there will be frequent re-modelling of the small *minors*, adjustments here and there of outlets—a process of gradual improvement, so that the water supply available may produce the maximum results. In the end, the system will be a network of water

channels with a total length of many thousands of miles, varying from the main canal, as wide almost as the river itself, through the branches, distributaries and *minors* to the small water-courses that bring the water to the fields. More, perhaps, than on any other factor, the canal depends for success on the efficiency of its system of distribution. To send down one particular branch more water than can be economically used, would not only deprive other areas of the fertilising stream, but might easily waterlog the land to which it is given. Water is too precious a commodity to be wasted. We have yet to realise that our man-power is still more precious. It seems to me that in our educational system, there are too few branches taking off from the main canal, too few distributaries from each branch, too few *minors* from each distributary, and, in consequence, there are too few fields which receive the due amount of irrigation at the proper season. The bulk of the educational stream is allowed to run too far down the main canal ; opportunities for its useful employment on the way are wasted ; and, in the end, there is too much waterlogging. The problem is two-fold. We have not only to find means of diverting portions of the supply at earlier points in its course, but we have also to create the conditions, where they do not exist, in which the supply, when diverted, can be profitably used. This is undoubtedly the reform in Indian education, which is most urgently required. It concerns the educationist and the administrator alike, and the

two must work together to produce a practical scheme. Proposals to this end were made by the Punjab University Enquiry Committee. They may or may not be those best suited to the province. The University authorities consider they are not—an opinion which they are quite entitled to hold ; but it is not unreasonable to ask that, when the existence of the disease is admitted by all and the urgent need for a cure is generally accepted, the family physicians should suggest some alternative method of treatment.

There is a large body of opinion that more of the stream of youth should be diverted into the channels of technical and vocational education, and I am myself strongly in sympathy with that view. It is a subject which is closely connected with industrial and commercial development, and, again, the administrator is concerned as much as the professor. It has received from neither the attention it deserves. The chief reason, I believe, is that there are comparatively few experts in this country, and very few in this province, who can speak with authority on its various aspects.

........................The student of to-day has more confidence in himself and a greater sense of self-respect. He has also the spirit of comradeship, and the modern development of games is bringing into wider exercise his innate qualities of sportsmanship. These seem to me to be some of the characteristics which are required to redeem the Punjab from the sectarian and communal influences which cloud its present, and threaten

its future. I am often told, when a communal disturbance occurs, that the ignorant masses and, especially, the hooligans are entirely responsible. It may be and often is the case, that the *goonda* element start the rioting and take an active part in it. But I have always refused to accept the comfortable theory that the educated classes are immune from responsibility. On the contrary, communal disorder is merely the culmination of a condition of sectarian strife and bickering, in which men of education, who should know better, are mainly concerned. In any case, education must be written down as a failure in this province, if the men it produces have not got the character or courage to influence the masses against movements and tendencies which every educated person knows to be directly opposed to the welfare of the province and its people. Self-respect and self-confidence are powerful correctives against communal suspicions and animosities. If the people of different creeds wish to live in harmony with each other, they must have faith in themselves and in each other, and it is because they temporarily lose this, that bitterness and doubts arise. A stranger who did not know the Punjab, and who depended for his knowledge on the writings in the Press and the general trend of speeches at the present time, would believe that each community was living in a water-tight compartment, and that its chief object was to do harm to the others. He would envisage a state of perpetual hostility, devoid of any mutual respect or any mutual

service, a condition of warfare in which one community was desirous of scoring, or at least of claiming, a victory over the others. A little enquiry would, however, reveal a different state of affairs. He would learn that there are very few revenue estates in the Punjab that are owned, far less populated, by members of a single community, and that Muslims, Hindus and Sikhs have lived together for generations and are now living together in peace and friendship in thousands of villages. Indeed, if it were otherwise, it would be impossible for them to live at all. He would find that the Executive and Judicial administration is being conducted by officers of all communities, and that it is part of the normal routine of these officers to do justice regardless of community or class; that the schoolmasters teach the same courses to, and show the same care towards, people of all communities; that the doctors do not discriminate between their patients according to their religion; that the Hindu lawyer does not only defend Hindus; that the Muslim landlord has other tenants besides Muslims; and that the money-lender looks for clients outside his own community. In short, he would find that even at times of the most bitter feeling, community of interests pervades every sphere of life, and that an account of mutual services would infinitely exceed an account of mutual animosities. It is because people ignore these facts that there is wanting a sense of proportion in approaching the communal problem. Greater faith and charity are needed, and the Univer-

sity man can help to supply these by maintaining his own self-respect and by practising and preaching the confidence in others which he learnt during his student days. Again, he can practise in after life the lessons of comradeship which he has leaınt at the University. There he mixes in the lecture rooms, in the field of sport, in the University Training Corps and in the various social clubs with men of all communities and classes. His friends are not confined to those of his own religion, and if he attempted to carry out anything in the nature of a communal boycott, he would make life intolerable for himself and for others.

Lastly, the problem of communalism would cease to exist, if the ordinary relations of life were governed by the same principles of sportsmanship as influence the great majority of students. Fair play is the first essential of sport, and only too often communalism is the very negation of fair play. It is unsporting to abuse another man's religion deliberately to offend his feelings, to magnify small issues into great ones, to refuse to make up quarrels when a little good-will can restore peace, and, generally to refuse to pull one's weight for the good of the country. Things are being done every day in the name of communalism, which those who do them would be the first to condemn as foul play if they related to the every-day affairs of life. It is a special responsibility of the men who go forth from this University, to order their dealings with their fellowmen, in public as well as in private life,

in the spirit of fair play and straight dealing. Believe me, the solution of communal dissension lies in the hands of the educated classes and not of the masses.

As education extends, the responsibility of this University will grow for the formation and the moulding of conceptions of civic duty, and the manner in which it discharges this responsbility, will largely determine the political and social future of the province.
